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THE INCIDENT COMMAND SYSTEM

(abbreviated explanation)

he INCIDENT COMMAND SYSTEM (ICS) is a tool by which emergency response personnel can command and control emergency incidents and the resources utilized within them. Without the ICS, the emergency incident commander is helpless in the effort to effectively and safely control small and, especially, large-scale incidents. The results or such lack of control at emergency incidents can be disastrous. Civilians and/or fire fighters can die or be seriously injured. Thus, by employing the ICS, emergency personnel can effectively expand their control of emergency operations as the operation itself expands. Additionally, the ICS, by its design, limits the span of control of the incident commander to five (5) or less operational areas. Such limitation ensures that the incident commander can maintain an effective level of monitoring control over emergency operations.

The Primary Features Of The Incident Command System Are Its:

Adaptability - The ICS can be used for fires, Haz-mat, earthquakes, etc.
 Flexibility - The ICS can expand to adapt simple or complex operations.
 Span of Control - The ICS limits the incident commander's span of control to a manageable 5 to 1 ratio.

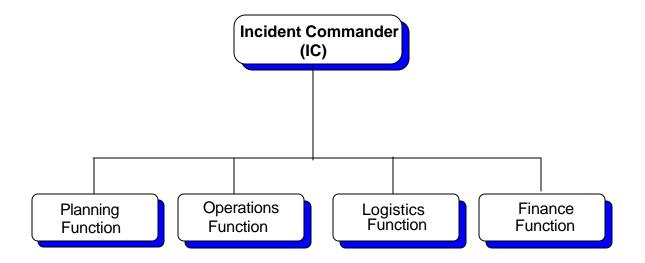
4. Unity of Command - The ICS clearly identifies the incident commander and a clear chain of command.

The Five (5) Major Functions Of The Incident Command System Are:

- 1. The INCIDENT COMMANDER.
- 2. The PLANNING Function.
- 3. The OPERATIONS Function.
- 4. The LOGISTICS Function.
- 5. The FINANCE Function.

Incident Command System Continued

The Organizational Structure of ICS Is:



The INCIDENT COMMANDER ("Street Name" Command) Ex: Raines Rd. Command

- 1. Prepares incident objectives.
- 2. Approves final plans.
- 3. Approves requests for resources.
- 4. Implements the 5 ICS functions.
- 5. Establishes Staging Area.

THE PLANNING SECTION

- 1. Collects, evaluates, disseminates incident information.
- 2. Gathers, analyzes incident data.
- 3. Develops alternative tactical operation plans.
- 4. Conducts planning meetings.
- 5. Prepares action plans.
- 6. Prepares the incident demobilization plan.
- 7. Utilizes 4 primary assistance units:
 - a. Resources Unit Compiles arrival, location, availability of resources.
 - b. Situation Unit Collects, processes, organizes, incident information.
 - c. Documentation Unit Maintains accurate incident files.

d. Technical Specialists - Groups who possess special technical expertise related to incident.

Incident Command System Continued

THE OPERATIONS SECTION

- 1. Manages the incident tactical operations.
- 2. Implements plans and strategies.
- 3. Utilizes resource categories:
 - a. Single resources (pumpers, trucks, squads, etc.)
 - c. Task Forces Companies combined for special tasks.
 - d. Sectors Large area commands.
 - e. Branches Larger geographical or functional commands.
- 4. Utilizes Staging Areas.
- 5. Utilizes Air Operations.
- 6. Utilizes Medical Groups triage, treatment, transport.

THE LOGISTICS SECTION

- 1. Provides support to the incident and to incident personnel.
- 2. Utilizes logistical sub-units:
 - a. Communications.
 - b. Medical support/treatment to incident personnel.
 - c. Food supplies.
 - d. Operational supplies.
 - e. Rehabilitation facilities.
 - f. Ground support: Fuels, apparatus repairs, etc.

THE FINANCE SECTION

- 1. Establishes Time Unit Keeps personnel / equipment time records.
- 2. Establishes Procurement Unit Expedites vendor supplies.
- 3. Creates Claim Unit Handles injury, death, civilian claims.
- 4. Creates Cost Unit Provides cost estimates/summaries of incident, cost-effectiveness analysis.

Incident Command System Continued

THE INCIDENT COMMAND STAFF POSITIONS ARE: (Answering directly to the IC)

- 1. Information Officer
- 2. Safety Officer
- 3. Liaison Officer
- 4. Command Staff Officer

INFORMATION OFFICER:

- 1. Responsible for establishing and maintaining media contact.
- 2. Communicates complete, accurate incident information to media.
- 3. Incident information includes:
 - a. Causes of the incident.b. Scope of the incident.c. Current Situation.If known or else, undetermined)(How big is it? Damage extent?)(What emergency forces are doing)
 - d. Resources Committed. (How many emergency personnel / equipment are involved)

SAFETY OFFICER

- 1. Assesses hazardous, unsafe situations.
- 2. Facilitates personnel safety.
- 3. Generally works through chain of command.
- 4. Has authority to suspend, or correct immediate unsafe operations, and afterwards notify the incident commander.

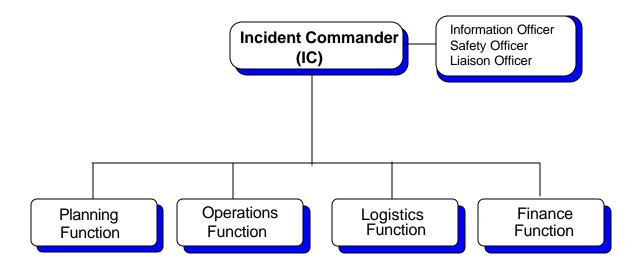
LIAISON OFFICER

1. Acts a point of contact for representatives from assisting agencies.

January 5, 2000

Incident Command System Continued

THE COMPLETE ORGANIZATIONAL STRUCTURE OF ICS IS:



INCIDENT COMMAND SYSTEM COMMAND AND COMMUNICATION PROCEDURES

The following command procedures are to be utilized by Officers and personnel during operations at emergency incidents. Communication procedures shall be used during all radio transmissions.

USING THE INCIDENT COMMAND SYSTEM (ICS)

The Incident Command System shall be used at ALL MULTI-COMPANY fire department and Medical Emergencies to which fire department equipment and personnel respond, and in which fire department authority for command and control is utilized. Under Tennessee State law, the fire department is the responsible command authority to any emergency to which it is called.

CONFIRMATION OF COMMAND BY THE FIRST ARRIVING OFFICER

On all Multi-Company Responses, the first arriving fire fighting officer will assume command of any incident, including rescue assignments involving EMS personnel, by transmitting a brief summary of the conditions and his designation of himself as the Incident Commander. However, the Paramedics will have complete medical authority concerning patient care until relieved by a higher-ranking EMS Supervisor. In designating command, the Officer will also identify the incident command by using the street name, business name, or geographic name. Such identification will be retained by all succeeding Incident Commanders who assume command of the incident.

Example: "Engine 23 scene, small one-story frame, fire showing in Alpha-Bravo sector, 25% involved, I have Jackson command.

"Engine 10 scene, I have one large bulk storage tank, see a lot of fire, I have Mapco Command."

"Truck 19 scene, I have 2 cars and 1 tractor-trailer truck, victims trapped, I have 240 Command."

Communication Model

When talking on the radio, state the call number (or name) which you are calling $\underline{\text{first}}$, followed by your identifying number.

Example: "Dispatch, engine 23 on the scene...."

"Attack, Command. Give me your present position."

"Command, Attack. I am in the stairway."

ICS COMMAND DESIGNATION

The person in charge of an incident will be designated by the term "COMMAND" with the incident identifier preceding it (i.e. Jackson Command, or Mapco Command, etc.). By using this method, the division can have any number of different incidents working within the City and Fire Communications should be able to keep track of which incident is being referenced. When the Incident Commander communicates on the radio talkgroup "FIRE1", he will use the identifier with the term command to identify himself.

Example: "Mapco Command, Give me a 2nd Alarm."

When communicating to on-scene personnel on the fireground talkgroup "GRD" which was assigned to work the incident on, the IC will not need to use the identifier. He need only refer to himself as "Command."

Example: "Operations, Command, I am sending you 2 more trucks." or "Medical,

Command, I am sending you 2 more Units."

COMMANDING INCIDENTS

The Incident Commander (IC) is responsible for the effective administration of the incident command functions of planning, operations, logistics, and finance. All emergency incidents require the management of the first three functions: planning, operations, and logistics. The finance function is usually required when incidents involve agency participation from outside the fire department, or when incidents will involve financial reimbursement.

In most incidents, the IC will manage all functions throughout the incident. Only in large incidents (beyond 1st alarm assignments), will the IC begin the process of delegating the various functions to subordinate command officers. Such delegation is necessary because large incidents exceed the span of control of the IC to the extent that he can no longer command effectively. The design of the Incident Command System dictates that the span of control of command officers will not exceed five (5) subordinates.

Level I Command Position: The Incident Commander should consider a mobile position located in the tactical area. The objective of the mobile position provides an adequate view of company operations and improves accountability while commanding small scale incidents. A mobile command position is authorized provided that the number of committed on scene companies are five (5) or less. The Incident Commander should consider staffing the Operations position if the Incident Commander must remain in a stationary position. A command post is not necessary in a level I command position.

Commanding Incidents
Continued

Level II Command Positions: The Incident Commander MUST assume a STATIONARY position from which to command the incident when the number of on-scene committed resources exceeds (5) companies. Also, a command post must be established at the stationary command position. Command officers should select a command position and/or command post location in close proximity to the tactical area for observation purposes unless the incident requirements dictate otherwise, (i.e., Haz-Mat, Confined Space Rescue, High Rise, etc.).

NOTE: If the Command Position and/or Command Post cannot be located within the tactical area, the position of OPERATIONS must be assigned to another command officer. Again, unless the incident situation dictates otherwise, the Incident Command should attempt to locate the Command Post in close proximity to the tactical area whenever possible.

Also, the IC should make every attempt to coordinate the response of all multi-agency command vehicles (i.e., Police, EMA, Red Cross, etc.) to an area immediately adjacent to the fire department command post location. This practice will greatly improve the coordination of all responding agencies to large scale incidents.

In all incidents, the Incident Commander (not initial Company Officer), whether mobile or stationary, is responsible for accurate accounting of company positions & operating status (see Tactical Worksheet section) at all times.

Thus, the following command procedure is established for emergency incidents:

- 1. The initial arriving Fire fighting Officer will assume command of all multi-company emergency response incidents and "name" the incident. EX: "AVERY COMMAND."
 - If the initial company officer establishes a command position, separate from his/her own personnel, then he <u>MUST</u> assign Supervision of his personnel to another officer. The initial company officer will re-join his company after Transfer of Command to an Officer of higher rank (Battalion Chief or Division Chief)
- 2. Later arriving fire command officers of higher rank (Battalion Chief, Division Chief, etc.) should take time to make an initial incident assessment of tactical operations prior to assuming a Level I or Level II command position.
- Later arriving command officers of higher rank MAY NOT assume any subordinate function (operations, sector supervisor, etc.) without being designated to that position by the IC.

Commanding Incidents Continued

- 4. Later arriving command officers of higher rank should avoid transmitting radio messages in regard to the incident, prior to assignment as an incident subordinate or IC, except to transmit "Emergency Traffic."
- 5. Later arriving fire officers of higher rank will assume command of the incident **ONLY** after transfer of command procedures have been completed.
- Once incident command is assumed by a command officer, the officer MUST remain in command until the incident is "under control" or transferred to a higher ranking command officer.
- 7. Once a command post is established, later arriving staff personnel and command officers MUST report to the command post, upon their arrival. This includes but is not limited to Fire Investigators, Training personnel, Command Staff personnel and the Safety Officer.
- 8. UNITY OF COMMAND MUST be maintained at all incidents.

TRANSFER OF COMMAND

When a higher ranking officer assumes command, the transfer of command will occur ONLY after the following procedures are carried out:

- 1. Information Transfer: Transfer overall strategic goals and tactical objectives. Include the positioning of fire companies, the extent of the emergency (fire extent, victims, etc.), and additional needs (more companies, personnel, units, etc.)
- 2. Confirmation of Transfer: The Officer who assumes command must confirm his status with the phrase, "I have Command" to the preceding Incident Commander.

Transfer Process:

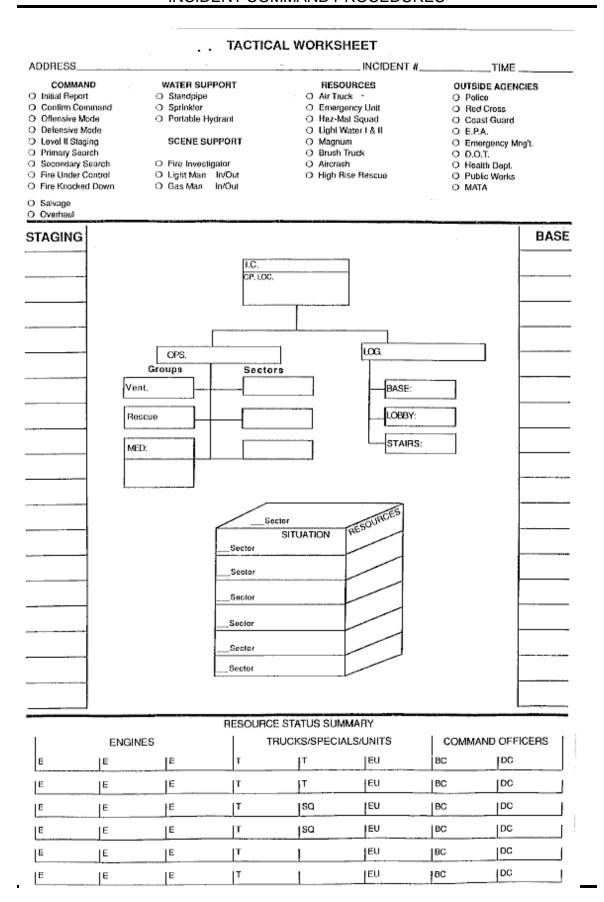
Transfer of Command from Company Officer to a Command Officer (Command Officers are Battalion Chief rank or higher): Transfer may be accomplished either by radio or face-to-face meeting.

Transfer of Command Between Command Officers: Transfer **MUST** be accomplished through face-to-face meeting ONLY. Transfer must include the tactical worksheet if utilized.

Commanding Incidents
Continued

TACTICAL WORKSHEET

With the arrival of the first Division Chief a tactical worksheet shall be constructed and maintained throughout the incident. The worksheet shall contain a listing of the companies, their locations and status, an incident address, radio requests made (Fire Investigator, Light Man, etc.), and a diagram of the incident with company locations. This worksheet shall be passed to the higher ranking officer should command be transferred. A sample of the Tactical worksheet is on the following page.



THE COMMUNICATION MODEL

(How to talk and answer on the radio)

When a message is transmitted on the radio, the receiver of the message shall confirm reception of the message by briefly re-phrasing the message. Such confirmation allows the sender of the message to know that the receiver has understood the transmission.

Example: Sender: "Division 3, respond with other companies to 1633 Marjorie- A

report of a house on fire."

Receiver: "Check Division 3, 1633 Marjorie, house on fire."

Sender: "Engine 5, Operations, lay two (2) lines into Truck 5."

Receiver: "Check Engine 5, lay two (2) lines into Truck 5."

When communicating with the Fire Communications Bureau, the sender shall identify himself and transmit his message. There is no need to call Fire Communications and await their response prior to transmitting the message. Once the message is transmitted to Fire Communications, they will confirm reception of the message by briefly restating the message.

Example: Sender: "Dispatch, Division 5 at Armour Center."

Receiver: "Check Division 5, at Armour Center."

When Communicating on a frequency from one mobile radio to another mobile radio, the sender should utilize the same communication procedure as stated above. The sender should call the receiver, identify himself (Do Not Go through Fire Communications), and then transmit the message. The receiver should confirm the reception of the message by re-statement or respond in such a way that the sender will know that the message was understood.

Example: Sender: "Battalion 2, Division 1, report to my quarters at 1100 hours."

Receiver: "Check Battalion 2, your quarters at 1100 hours."

NOTE: Should communication between the mobile radios be hindered, Fire Communications may be able to relay the messages. Note however that each and every radio transmission is simulcasted from each of the 5 transmitter sites at the same time.

RADIO TALKGROUPS LAYOUT CHART

Most Fire Division mobile and portable radios are equipped with 77 talkgroups. The following chart shows Talkgroups for a lower tiered radio.

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	L			L	G		L	G		L			L	-		L	A U		L	Α		L	В
	Ε			Ε	R		Ε	R		Ε			Ε	R		Ε	ΙP		Е	I G		Е	Α
Z	С	F	Z	С	F O	Z	С	FO	Z	С		Z	С	0	Z	С	ΝP	Z	С	ΝE	Z	С	С
0	Т	1	0	Т	ΙU	0	Т	ΙU	0	Т	E	0	Т	0	0	Т	1 0	0	Т	TN	0	Т	K
N	0	R	N	0	RN	N	0	RN	N	0	M	N	0	M	N	0	NR	N	0	E C	N	0	U
E	R	E	Ε	R	E D	Е	R	E D	Е	R	S	Ε	R	S	Ε	R	GT	Е	R	RY	Ε	R	Р
Α	1	FIRE1	В	1	FIRE1	С	1	FIRE1	D	1	EMS 1	Е	1	EMS 1	F	1	FIRE1	G	1	FIRE1	Р	1	EMRG
Α	2	FIRE2	В	2	FIRE2	С	2	FIRE2	D	2	EMS 2	Ε	2	BAPTC	F	2	FIRE2	G	2	EMS 1	Р	2	EMRG
Α	3	EMS 1	В	3	EMS 1	C	3	EMS 1	D	3	FIRE1	Е	3	BAPTE	F	3	EMS 1	G	3	FDNET	Р	3	EMRG
Α	4	EMS 2	В	4	EMS 2	С	4	EMS 2	D	4	FIRE2	Ε	4	CRUMP	F	4	EMS 2	G	4	PDNET	Р	4	EMRG
Α	5	OPS1	В	5	GRD6	С	5	GRD15	D	5	EMGRD	Ε	5	EWOOD	F	5	ARSON	G	5	SYNET	Р	5	EMRG
Α	6	OPS2	В	6	GRD7	С	6	GRD16	D	6	GRD24	Ε	6	LBOHN	F	6	INSPC	G	6	NPSP1	Р	6	EMRG
Α	7	OPS3	В	7	GRD8	С	7	GRD17	D	7	GRD25	Ε	7	MED-B	F	7	SPEV1	G	7	NPSP2	Р	7	EMRG
Α	8	OPS4	В	8	GRD9	С	8	GRD18	D	8	GRD26	Ε	8	MED-M	F	8	SHOP	G	8	NPSP3	Р	8	EMRG
Α	9	GRD1	В	9	GRD10	С	9	GRD19	D	9	GRD27	Ε	9	MED-T	F	9	TRN 1	G	9	NPSP4	Р	9	EMRG
Α	10	GRD2	В	10	GRD11	С	10	GRD20	D	10	GRD28	Ε	10	METHC	F	10	TRN 2	G	10	NPSP5			EMRG
Α	11	GRD3	В	11	GRD12	С	11	GRD21	D	11	GRD29	Ε	11	METHN	F	11	TRN 3	G	11	MLGW1	Р	11	EMRG
Α	12	GRD4	В	12	GRD13	С	12	GRD22	D	12	GRD30	Ε	12	METHS	F	12	TRN 4	G	12	MLGW2	Р	12	EMRG
Α	13	GRD5	В	13	GRD14	С	13	GRD23	D	13	EMA	Ε	13	STFRN	F	13		G	13	MLGW3	Р	13	EMRG
Α	14	VOCAL	В	14	VOCAL	С	14	VOCAL	D	14	VOCAL	Ε	14	STJOE	F	14	VOCAL	G	14	MLGW4	Р	14	EMRG
Α	15	CTC	В	15	CTC	С	15	CTC	D	15	CTC	Е	15	VA	F	15	CTC	G	15	HPNET	Р	15	EMRG
Α	16	REGRP	В	16	REGRP	С	16	REGRP	D	16	REGRP	Е	16	REGRP	F	16	REGRP	G	16	REGRP	Р	16	REGRP

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RADIO TALKGROUPS LAYOUT CHART

Most Fire Division mobile and portable radios are programmed with 77 talkgroups. The following chart shows a program for the upper tiered radio with 151 Talkgroups.

Z O N E	SELECTOR	F I R E	Z O N E	SELECTOR	G R F O I U R N E D	Z O N E	SELECTOR	G R F O I U R N E D	Z O N E	SELECTOR	E M S	Z O N E	SELECTOR	E - R O O M S	Z O N E	SELECTOR	T R S A U I P N P I O N R G T	Z O N E	SELECTOR	A I G N E T N E C R Y	Z O N E	SELECTOR	M P D	Z O N E	SELECTOR	B A C K U P
Α	1	FIRE1	В	1	FIRE1	С	1	FIRE1	D	1	EMS 1	Е	1	EMS 1	F	1	FIRE1	G	1	FIRE1	Н	1	FIRE1	Р	1	EMRG
Α	2	FIRE2	В	2	FIRE2	С	2	FIRE2	D	2	EMS_2	Е	2	BAPTC	F		FIRE2	G		EMS_1	Н		EMS_1	Р		EMRG
Α	3	EMS_1	В	3	EMS_1	С	3	EMS_1	D	3	FIRE1	Е	3	BAPTE	F	3	EMS_1	G	3	FDNET	Н	3	PD-NO	Р	3	EMRG
Α	4	EMS_2	В	4	EMS_2	С	4	EMS_2	D	4	FIRE2	Ε	4	CRUMP	F	4	EMS_2	G	4	PDNET	Н	4	PD-SO	Р	4	EMRG
Α	5	OPS1	В	5	GRD6	С	5	GRD15	D	5	EMGRD	Ε	5	EWOOD	F	5	ARSON	G	5	SYNET	Н	5	PD-ES	Р	5	EMRG
Α	6	OPS2	В	6	GRD7	С	6	GRD16	D	6	GRD24	Ε	6	LBOHN	F	6	INSPC	G	6	NPSP1	Н	6	PD-WE	Р	6	EMRG
Α	7	OPS3	В	7	GRD8	С	7	GRD17	D	7	GRD25	Ε	7	MED-B	F	7	SPEV1	G	7	NPSP2	Н	7	PD-CE	Р	7	EMRG
Α	8	OPS4	В		GRD9	С	8	GRD18	D		GRD26	Ε	8	MED-M	F	8	SHOP	G	8	NPSP3	Н	8	PD-DT	Р	8	EMRG
Α	9	GRD1	В	9	GRD10	С	9	GRD19	D	9	GRD27	Ε	9	MED-T	F	9	TRN_1	G	9	NPSP4	Н	9	PD-CO	Р	9	EMRG
		GRD2			GRD11			GRD20			GRD28			METHC			TRN_2			NPSP5			PDSTB		10	EMRG
Α	11	GRD3	В	11	GRD12	С	11	GRD21			GRD29	Ε	11	METHN	F	11	TRN_3	G	11	MLGW1	Н	11	PD-CW	Р	11	EMRG
		GRD4	В		GRD13			GRD22			GRD30			METHS	F		TRN_4			MLGW2			PDTAC	Р		EMRG
		GRD5	В		GRD14			GRD23			EMA			STFRN	F		F-ADM			MLGW3				Р		EMRG
		VOCAL			VOCAL			VOCAL			VOCAL			STJOE	F		VOCAL			MLGW4				Р		EMRG
		CTC	В		CTC	С		CTC	D		CTC	Е		VA	F		CTC			HPNET	Н	15		Р		EMRG
Α	16	REGRP	В	16	REGRP	С	16	REGRP	D	16	REGRP	Ε	16	REGRP	F	16	REGRP	G	16	REGRP	Н	16	REGRP	Р	16	REGRP

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RADIO TALKGROUPS DESIGNATED USE

FIRE1 - Utilized as the primary communications talkgroup between FIRE COMMUNICATIONS and all fire suppression personnel. All fire calls are broadcast over this frequency. The "FIRE1" talkgroup is the same talkgroup in Zone "A" to Zone "G" (also Zone H if radio is so equipped).

FIRE2 - Utilized as an additional fire dispatch channel during Multiple alarms, Alert three's, Mass Casualty situations etc. May also be used as a PRIMARY CHANNEL for Haz-Mat entry situations. The "FIRE2" talkgroup is the same talkgroup in Zones "A, B, C, & D". "FIRE2" does not appear in Zones "E or G".

GRD1 to GRD30 - Utilized as fireground operation talkgroups. These 30 Fireground talkgroups are all recorded at Fire Communications for reporting, time stamping events that occur on the scene of an Incident and for critiquing the incident. These 30 talkgroups appear in Zones "A, B, C & D". Anytime more than one piece of fire and/or Emergency Unit equipment is assigned to a run from the CAD system in fire dispatch, the CAD system tells the Motorola radio system to automatically regroup all the portables assigned to personnel on these pieces of equipment to one of the 30 fireground talkgroup channels. This means when more than one piece of equipment is responding to and advises scene, they will advise on their mobile radio as done in the past. When fire fighters and/or paramedic/fire fighters exit the apparatus they will not have to switch their radios to a fireground channel. The portable radios will already be on one of the thirty fireground channels. When the Officer or Incident Commander needs to communicate back to the dispatcher they will rotate the talkgroup selector knob to #16 "REGRP" and then the talkgroup selector knob to #1 "FIRE1" and talk to the fire radio dispatcher ("FIRE1"). For the Officer or Incident Commander to rejoin the fireground talkgroup their fire is being worked on, simply switch the talkgroup selector knob back to #16 "REGRP" (the regroup talkgroup). An advantage to this method is a company responding may monitor the fireground talkgroup after being assigned, and others say in an engine house may monitor fireground radio activity by the radios talkgroup to the proper fireground talkgroup the incident is being worked on.

(A5-A8) OPS1 to OPS4 - These are set aside as Operational Talkgroups. The Incident Command has these talkgroups to use to the best of his advantage. The "A5 OPS1" talkgroup is used during Mass Casualties/Alert Three's at Memphis International Airport. Another example would be a disaster over a large area such as a tornado destroying several city blocks. The Incident Commander may assign a Task Force to a specific mission in a certain area of the destruction and order them to carry out their assignment on talkgroup "A6 OPS2". The Incident Commander could then get in touch with this Task Force at any time on talkgroup "A6 OPS2". This just gives the department much more flexibility than we have had in the past.

RADIO TALKGROUPS DESIGNATED USE

Continued

- **EMS1** utilized as the primary communications talkgroup between FIRE COMMUNICATIONS and all EMS Units. All emergency Unit calls are broadcast over this talkgroup. The "EMS1" talkgroup is the same talkgroup in Zone "A" to Zone "G" (also Zone H if radio is so equipped).
- **EMS2** Utilized as an additional EMS dispatch talkgroup between EMS Units and Fire Communications. The "EMS2" talkgroup is the same talkgroup in Zone "A" to Zone "F" (also Zone H if radio is so equipped). The "EMS2" talkgroup is the same talkgroup in Zones "A, B, C, D, & F". "FIRE2" does not appear in Zones "E, G. (or Zone H if radio is so equipped).
- **(D5) EMGRD** EMS Ground is another talkgroup that can be utilized by EMS personnel on the scene of large scale events. This just gives some flexibility if EMS1 and EMS2 are being used as PRIMARY CHANNELS. The "EMGRD" talkgroup only appears in Zone "D5".
- **CTC** The car-to-car channel is used for car-to-car radio traffic that is lengthy or inappropriate for FIRE1 or EMS1 channels. The CTC channel is the same channel from zone to zone. The "CTC" talkgroup is the same talkgroup in Zones "A, B, C, & D". "CTC" does not appear in Zones "E, & G. (or Zone H if radio is so equipped).
- **ZONE E, EMERGENCY ROOMS** Zone E is utilized by Paramedics in the field to communicate with the hospital emergency rooms. The hospitals are equipped with Fire Department radios and communications will involve relaying patient information and obtaining medical orders from a doctor. Paramedics simple switch to the talkgroup (channel) of the hospital they wish to talk to and raise the hospital. Hospitals are listed in alphabetical order within Zone "E". If the talkgroup (channel) is busy, a paramedic can utilize the telephone interconnect and select the specific hospital fire phone number which have been preprogrammed into the radios. Also Zone "G15 HPNET" is designated as a hospital net channel. This is an additional talkgroup that can be utilized in emergency situations. A possible scenario would be having multiple hospitals go to "G15 HPNET" for special instructions on a disaster type situation etc. "G15" was the only position available for this channel. It was originally in Zone "E" position #16 but had to be relocated due to the necessity of having a REGROUP channel within this particular zone and talkgroup position.

Radio Positions And Usage Continued

REQUESTING ANOTHER RADIO CHANNEL

Any radio message that requires transmission can and should be transmitted on the normal, primary radio talkgroup for which it is designated (fire - "FIRE1", Emergency Units - "EMS1", etc.). If a message requires confidential transmission, to avoid monitoring by the news media, have Dispatch go to a talkgroup other than a Primary Dispatch Talkgroup.

REQUESTING A CLEAR CHANNEL

The new 800 MHz Digital Trunked Radio system cannot be monitored by anyone other than personnel with radios programmed by Radio Maintenance, authorized by the City of Memphis and the respective Division Directors.

It is the City's intent to provide access for the news media by allowing them to purchase 800 MHz radios and the City will program them to receive only the Primary Dispatch talkgroups for Fire and Police. This will mean that talkgroups "FIRE1", "FIRE2", "EMS1" and "EMS2" will be monitored by the news media for news events. Other Talkgroups may be setup later for the media to monitor such as the hospital talkgroups.

Talkgroups such as the Car to Car (CTC), Operational channels "OPS1" through "OPS4" will not be monitored by the media and may be used similar as in the past as a "clear channel" was, with the exception being that all Fire personnel with a radio may monitor that transmission along with Fire Communications. Talkgroup (F13) F-ADM is a talkgroup set aside for the Fire Administration. This talkgroup appears in most of the upper tier supervisory level portables and mobiles.

FATALITIES: May be reported as in the past on the Primary Dispatch talkgroup "FIRE1" from the emergency scene. Changing to a Talkgroup that is not being monitored by the media is necessary when Fire Communications is being notified of the name of an injury or fatality, or when information is being transmitted that should not be heard by the media.

FIRE PERSONNEL INJURIES: Changing to a Talkgroup that is not being monitored by the media is necessary when reporting the injuries of personnel during emergencies. **Do not report** the name of an injured Fire Division employee without switching to a talkgroup not being monitored by the news media.

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RADIO CODE SIGNALS AND REPORTING

The numerous radio code signals which have been used in the past (signal K, L, G, X, etc.) will no longer be used. The only exception to this rule will be Signal "C" which will still be utilized to call for immediate response of police, Fire Investigators, Battalion Chief and Division Chief to assist fire personnel in imminent danger.

The use of plain, clear language will be used to make radio requests and to advise of unit location. The radio term "special" shall indicate the individual is to be shown out-of-service unless an extreme emergency necessitates his need for response.

Examples: "Engine 14-A, send an inside light man."

"Engine 47, call Fire Communications."

"Division 3, at Headquarters."

"104, Special at City Hall."

SPECIAL RADIO CODES - "YELLOW" and "RED"

Should a situation arise in which Fire Communications needs to communicate an urgent "private" message to personnel, they will inform the individual by radio of "CODE YELLOW." In such situation the individual shall acknowledge the message and move to an area in which incident victims or the public cannot overhear the radio transmission, and advise Fire Communications to go ahead with their message. A Code Yellow message is used when privacy is needed, however imminent danger is not apparent.

Example: "Mallory Command, Code Yellow."

"Check Mallory Command, Code Yellow."

Should a situation arise in which Fire Communications needs to communicate to personnel that "imminent danger" exists to personnel and that they should immediately retreat from the area, they will inform the individual by radio of "CODE RED". In such situation the individual shall acknowledge the message and immediately retreat from the area to a position of safety. The individual shall then contact Fire Communications and clarify the danger.

Example: "Lauderdale Command, Code Red."

"Check Lauderdale Command, Code Red."

INITIAL INCIDENT COMMANDER RESPONSIBILITIES - "COMMUNICATE YOUR STRATEGY AND TACTICS!"

The initial Incident Commander can be anyone within the Fire Department, but will usually be the Fire Company Officer. The initial Incident commander MUST identify the command and assume his role to begin the effective management of the incident. He must manage through clear, concise communication, and never hesitate in his responsibility to act.

Fire Situations - The Incident Commander must assume command, determine the proper mode (interior, exterior); Position hose lines; assign 2nd Engine to search, supply, attack; and organize the incident further if needed.

Haz Mat Situations - The Incident Commander must assume command, determine proper approach; establish staging for other in-coming companies; secure the area; initiate evacuation if needed; prepare for material identification and handling; and authorize decontamination.

Accident, Trauma Situations - The Incident Commander must assume command, secure the area; coordinate victim removal; coordinate medical treatment and transport; and initiate stabilization of the incident.

UNITY OF COMMAND

The management principle of "Unity of Command" means that EVERY EMPLOYEE ANSWERS TO ONE AND ONLY ONE SUPERVISOR, That means that for any action whatsoever, an employee should receive orders from one superior only.

Thus, the **ONLY** individual who can properly request additional resources within an incident is the Incident Commander. All other radio requests from other individuals (including Fire & EMS Personnel) will be directed by Fire Communications to go through the Incident Commander.

Example: If at a fire, 47-A requests a Light Man, Fire Communications would answer, "47-A,

transmit your message through Yale Command."

NOTE: Emergency radio transmissions are the ONLY radio transmissions which may

violate unity of command. In such case, "Emergency Traffic" procedures must be

used.

EMERGENCY TRAFFIC

The term "Emergency Traffic" will be utilized during a radio transmission by any fire personnel encountering an immediately perilous situation. "Emergency Traffic" will receive the highest communications priority from Fire Communications, Command and all operating units. Anytime "Emergency Traffic" is transmitted, ALL PERSONNEL MUST LISTEN ATTENTIVELY TO THE MESSAGE.

When an individual has a critical message, they will establish contact with Fire Communications.

Example: "Engine 24, Emergency Traffic." Fire Communications will confirm the request and

sound a 3-5 second tone. Fire Communications will, at the conclusion of the tone, advise the unit to "go ahead with your message." The unit will then transmit his message. During emergency traffic no other unit will transmit on the radio.

Emergency traffic is reserved only for the most dire radio message.

NOTE: It is understood that in many cases, the importance of the situation may dictate that

on-scene radio communications be carried out prior to the initiation of "Emergency Traffic" procedures. But personnel should realize the availability of the procedure

and use it when needed.

COMMAND OPERATIONAL PRIORITIES

From the command perspective, there are three (3) operational priorities:

- 1) Rescue (Life Safety)
- 2) Incident Control
- 3) Property Conservation

Each of these priorities shall be accomplished and confirmed by the Incident Commander according to the following benchmarks:

NOTE: Fire Communications shall document the times of the rescue and incident control

benchmarks.

Command Operational Priorities Continued

RESCUE - Rescue is complete when the secondary search is completed. Rescue is accomplished through the primary and secondary search. "Primary Search, All Clear" and "Secondary Search, All Clear" (in cases of structural fire), and "Rescue, All Clear" or "Rescue Complete" (in cases of trapped victims) must be transmitted to Fire Communications via radio to indicate that the Rescue benchmark has been reached.

INCIDENT CONTROL - Fire control is complete when the fire is knocked down. Fire control is accomplished through "Fire under control" and "Fire knocked down" radio messages, which also must be transmitted to Fire Communications.

"Incident Under Control" and "Incident Stabilized" shall be used during Haz Mat and other non-fire incidents.

PROPERTY CONSERVATION - Property conservation is complete when the salvage operations are complete. The radio message "Salvage Complete" is transmitted from the Officer responsible for the salvage operation to the Incident Commander. The Incident Commander DOES NOT transmit anything regarding salvage to Fire Communications.

INCIDENT STATUS REPORTING BY THE INCIDENT COMMANDER

The Incident Commander shall report the status of the incident to Fire Communications by using the following radio transmissions:

Radio Transmission Definition

"(Incident Name) Command" Use on city-wide radio transmissions.

"Command" Use at the scene, between operating units.

"Fire Under Control" No additional resources needed.
"Fire Knocked Down" Main fire is out and spread prevented.

"Primary Search All Clear" Primary search complete
"Secondary Search All Clear" Secondary search complete
"Rescue, All Clear" Trapped victims are rescued.

"Incident Stabilized" Haz-Mat or non-fire incident is controlled.

"Everything Coming In" All companies will return to in-service status.

"Emergency Traffic" Clear the radio channel for an emergency message.

NOTE: The IC must report the status of hose laid, aerial and snorkel use, and other pertinent incident information.

HOSE LAID - STATUS REPORTING BY THE INCIDENT COMMANDER

The status reports of hose laid will be the responsibility of the Incident Commander. In many cases, routine incidents will require the report be made by the initial Company Officer since he is designated as the Incident Commander. At expanded incidents, the subsequent Incident Commander should assure that proper status reporting has been accomplished to Fire Communications.

INCIDENT STATUS REPORTS - NORMAL SEQUENCE

Most fire emergencies will require a routine sequence of reported information by the Incident Commander. Of course, the IC should report any information which is pertinent to the incident in addition to the normal required information. The normal sequence of command events communicated by the Incident Commander during most fire emergencies shall be:

DISPOSITION (Size bldg., amount of involvement, sector location of fire)
CONFIRMATION OF COMMAND (Designated by street name, etc.)
LOCATION OF COMMAND POST (If Applicable)
PRIMARY SEARCH - ALL CLEAR (Or Victims located)
SECONDARY SEARCH - ALL CLEAR (Or Victims located)
FIRE UNDER CONTROL (No additional resources required)
FIRE KNOCKED DOWN

NOTE: Search and Fire Control may occur simultaneously, but must be reported when completed. Also, the sequence may vary according to the situation, that is, the secondary search may not be completed until the fire is knocked down.

AUTOMATIC DISPATCHING OF POLICE AND UTILITY COMPANY

The Fire Communications Bureau shall automatically notify the police on all structure fires in which a preconnect hose line or larger is used.

The utility company (Outside Light Man) shall be dispatched on all structure fires in which a pre-connect hose line or larger is used. The Incident Commander must request an Inside Light Man if needed.

NOTE: The Incident Commander should call for police and the utility company on all other incidents in which they are needed, and ask Fire Communications to disregard anyone when they are not needed.

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ICS STRUCTURE - OPERATIONAL LEVELS

All emergency incidents will include three (3) basic operational levels through which the incident will be structured. Such structuring allows for the effective, efficient functioning of both command and operating personnel.

Strategic Level - This level is operated by the Incident commander. It involves coordination of the major ICS functions of Command, Planning, Operations, Logistics, and Finance. This level is responsible for overall operational control, setting of incident strategy, approval of incident objectives, and allocation of incident resources.

Tactical Level - This level is operated by the Incident Commander, Group or Sector Command Officers assigned to specific subordinate functions by the Incident Commander or by the Operations Chief. The Tactical Level is responsible for the tactical deployment of resources assigned, evaluation and status communication with the IC. Such functions include Operations, Planning, Logistics, and Finance. Groups include functional areas such as fire attack, ventilation, rescue, medical, and others. Sectors include geographic designations such as Sector Alpha, Sector Bravo, Sector 1, and Sector 2.

Task Level - This level is operated by fire companies. The Task Level is responsible for evolution-oriented activities required to control and neutralize the emergency incident. Most of these task level activities are guided by standard operating procedures.

To develop effective incident control, management and command of emergency incidents must begin from the Strategic Level and build to the Task Level. The initial incident commander builds a management and organizational approach to the incident by first deciding the strategic goals of the incident (What needs to be done). Second, the IC defines the tactical objectives of the incident, usually with the aid of standard operating procedures (Who will do what; Where they will do it; When they will do it; and How they will do it). Finally, the IC assigns important tasks to the responding resources. Without effective coordination of the three operational levels, emergency incidents will be filled with confusion, inefficiency, low productivity, and dangerous increases in life and property loss.

SPAN OF CONTROL

A fundamental rule of management is that supervisors are only able to maintain an effective supervisory role over a limited number of subordinates. **The number of subordinates** assigned to a specific supervisor is called the supervisory "Span of Control." The design of the Incident Command System limits the Span of Control of all supervisors and of the Incident Commander to five (5) or less, Should the incident require an expanded level of resources, the ICS is also expanded to accommodate the resources while limiting the span of control to five or less.

ICS STRUCTURING - ROUTINE 1ST ALARM INCIDENTS

The normal operating organizational structure for 1st alarm incidents (no extra calls for equipment) shall be as follows:

Task Level - Engines, Trucks, Squads, and Emergency Units shall operate according to Standard Operating Procedures, and special objectives defined by the Incident Commander. They shall answer directly to the Incident Commander by using the radio call to "COMMAND" Unless specifically assigned to a tactical level subordinate status (answering to the Operations Officer). In all cases of 1st alarm company response, Company Officers should consistently utilize the term "COMMAND" when talking by radio to the Incident Commander. Under the ICS, the Incident Commander has complete charge of the Operations function until the incident size dictates that he delegate operations to the Battalion Chief or other Officer.

Example: "Command, Engine 14-A the fire is knocked down."

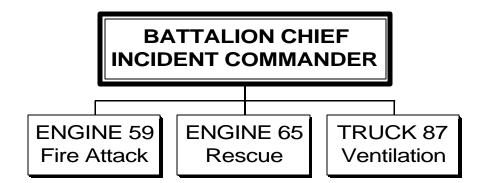
Tactical Level - Groups such as Fire Attack, Rescue, Ventilation, etc., will likely be used during routine fire situations. Larger functions such as Operations, Planning, Rescue, Ventilation, etc., will not normally be implemented until the span of control of the task level exceeds five (5). In 1st Alarm incidents, the tactical level Officer (Battalion Chief) shall either serve as Incident Commander (if not relieved) or as a Safety Officer/advisor to the Incident Commander until the incident advances to a larger extent. In such case, the Incident Commander will likely utilize the Battalion Chief as a mobile advisor to keep the IC aware of the progress and safety of the incident operations. The Battalion Chief may, on the other hand, be assigned as the Operations Chief to assume control and coordination of tactical objectives..

NOTE: The Incident Commander has the discretion to assign the Battalion Chief as a command officer as needed during any incident.

ICS Structuring - Routine 1st Alarm Incidents Continued

Strategic Level - An Incident Commander Shall be designated at all Fire Department incidents and he shall be responsible for all ICS functions until such time as he implements an expanded ICS command structure and delegates some functions. Should the IC determine to expand his ICS structure, he must advise all operating companies at the task level that they are being assigned to subordinate functions under a tactical level officer (normally the Operations Chief). When fire companies are assigned to a subordinate function, they will call their immediate supervisor by the function title: "OPERATIONS", "SECTOR ALPHA", "SECTOR 2", etc.

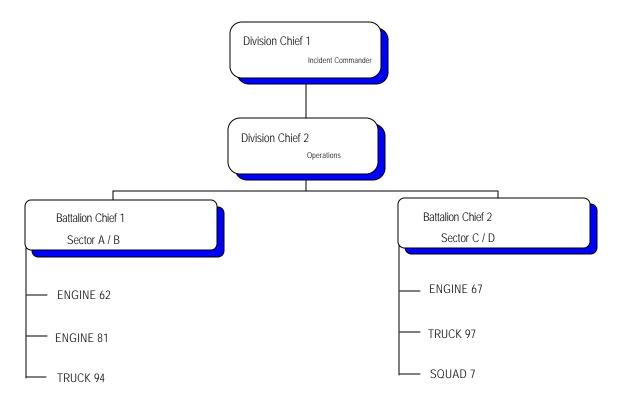
ROUTINE 1ST ALARM INCIDENT STRUCTURE



ICS STRUCTURING - EXPANDING INCIDENTS

As emergency incidents expand beyond the normal optimal span of control (5 or less), the Incident Commander will expand the ICS to meet the Tactical management needs of the incident. In such cases, Command Officers will be assigned to subordinate command functions and sectors to manage the Tactical Level. Extra companies and Command Officers may be requested in order to fill the expanding resource needs of the incident.

LARGER INCIDENT STRUCTURE



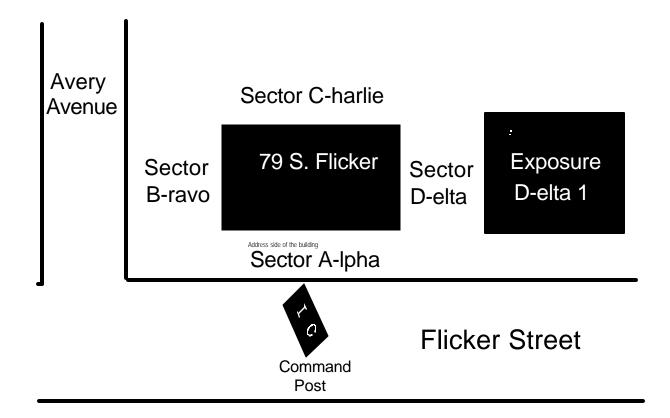
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INCIDENT SECTOR LETTER DESIGNATIONS

When an incident requires sectoring and the assignment of Sector Command Officers, the following SECTORING system shall apply, using a phonetic lettering system:

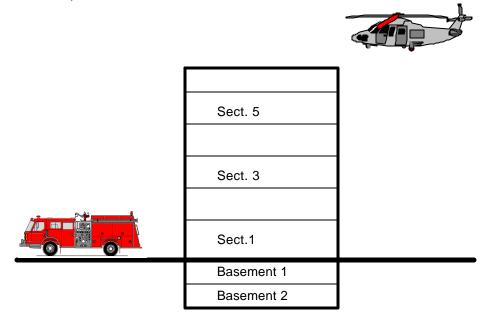
- 1. The <u>address side of the structure</u> will be designated the "ALPHA" Sector side of the incident, unless otherwise dictated by the Incident Commander, regardless of the location of the Command Post. The Incident Commander should attempt to establish the Command Post in the Alpha Sector side whenever possible.
- 2. Sector lettering shall proceed in a clockwise direction around the incident from Sector "ALPHA".
- Exposures shall be identified according to the Sector letter to which they are adjacent. The subsequent exposures shall be identified by using a progressive number for each exposure adjacent to the Sector.

Example: Sector "DELTA", Exposure DELTA 1, Exposure DELTA 2, Exposure DELTA 3, etc.



Incident Sector Letter Designations Continued

4. Floors of a structure shall be identified according to their level (story). The ground level shall be Sector 1, 2nd floor shall be Sector 2, etc. Basements shall be numbered sequentially from below the ground floor downward- Basement (or Basement 1), Basement 2, Basement 3, etc.



SECTOR OFFICER RESPONSIBILITIES

The Incident Command System will utilize various sector designations to manage an incident. Officers who are assigned to sector responsibilities will perform the following command functions:

- 1. Monitor work progress from a command position.
- 2. Redirect activities within the Sector as needed.
- 3. Coordinate sector activities with related sector activities.
- 4. Monitor safety and welfare of sector personnel.
- 5. Request additional resources as needed from superior.
- 6. Communicate with superior as necessary.
- 7. Reallocate resources within his sector.
- 8. Maintain a written accounting of resources assigned in the sector.

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COMMUNICATION WITHIN SECTORS

In order to maximize the use of radios, sector commanders should communicate to their respective sector companies by face-to-face communication rather than through the use of the radio. It is understood that the outside command positioning of Sector commanders will necessitate the use of the radio in many cases to communicate with interior operating companies, however such communication should be minimized.

Company Officers must communicate the interior and area conditions which they are experiencing to their Sector Commander so that he may be able to make tactical judgments about the operation. When they (company officers) believe that their working area is "under control" they should say so, or when they believe the fire is out "fire knocked down." Communicate face-to-face when possible.

FIRE COMPANY AND SECTOR PROGRESS REPORTS DURING INCIDENTS

Periodic progress reports may be required of operating companies and sectors during emergency incidents. In such case, the command officer requesting the information shall make his request known by using the term "STATUS" indicating that he wishes to know the status of the fire company's progress.

Example: "Engine 42-A, Operations, Status." or "Operations, Command, Status."

In responding to a status request, the Officer shall communicate his:

- (1) Position
- (2) Progress
- (3) Additional Needs if any

Example: "Operations, Engine 42-A, We are on the 2nd floor and I have the fire knocked down. Have someone check the attic." or "Command, Operations, Companies are on the 2nd floor and we have the fire knocked down. We are checking the attic for fire extension. I need one company for relief."

PORTABLE AND APPARATUS RADIO IDENTIFICATION FOR FIRE COMPANIES

Fire Companies shall utilize the following identification codes on each Company when using their portable radios regardless of shift working:

Officer's radio: (company #) A Example: 42-A, Truck 9-A 2nd Co. radio: (company #) B Example: 42-B, Truck 9-B 3rd Co. radio: (company #) C Example: 42-C, Truck 9-C

NOTE: Additional radios which may be utilized by the company will use the subsequent alphabetic letter to identify the radio. The Company Officer's portable radio will always be the "A" radio. Apparatus radios and the portable shall utilize the description of their apparatus with their number.

Examples: Engine 23, Truck 9, Squad 6, etc.

INCIDENT COMMANDER REQUEST FOR ADDITIONAL EQUIPMENT

The Incident Commander shall request additional equipment in either of the following ways:

1. Request a greater alarm (2nd, 3rd, 4th, alarm, etc.). Example: "Latham Command, give me a 2nd Alarm."

2. Request additional engines, trucks, and command officers by asking for specific types of equipment.

Example: "Latham Command, give me 1 Engine, 2 Trucks, and 1 Command Officer." or

"Latham Command, give me 2 Engines, 2 Trucks, and 2 Command Officers."

NOTE: When requesting additional equipment, the Incident Commander should identify a level II staging area.

Example: "Latham Command, give me a 2nd Alarm. Level II staging is at Latham and Belz."

NOTE 2: When more than 1 Command Officer is requested, 1 Division chief shall be dispatched for each 2 Battalion Chief.

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INCIDENT UPGRADING - GREATER ALARMS

Emergency incidents shall be upgraded to a greater alarm according to either of the following methods:

- 1. Request for a greater alarm (2nd, 3rd, etc.) by the Incident Commander, or
- 2. When the number of Engine companies replenished to the Incident equals the number of engine companies dispatched initially, the incident will be upgraded to the next higher alarm level by Fire Communications. In such cases, Fire Communications shall advise the Incident Commander that, "The incident has been upgraded to a "#" Alarm, unless the fire has already been declared Under Control". Fire Communications will notify the Incident Commander, and ask whether staff personnel should be notified.

RADIO CALL SIGNS - INCIDENT COMMAND SYSTEM

The following radio call signs shall be used when communicating by radio when using the Incident Command System:

RADIO CALL	SIGN	DEFINITION

"(Incident Name) Command" Use on all city-wide transmissions.

"Command" Use at incident scene
"Planning" ICS Planning Chief
"Operations" ICS Operations Chief
"Logistics" ICS Logistics Chief

"Medical" ICS Medical Group Supervisor

"Finance" ICS Finance Chief

"Staff" ICS Staff Command Officer

"Safety" ICS Safety Officer
"Information" ICS Information Officer
"Liaison" ICS Liaison Officer

"Evac" ICS Evacuation Group Supervisor "Rehab" ICS Rehabilitation Team Leader

"DeCon" ICS Decontamination Group Supervisor

"Air Truck" Air Truck Driver

"Water" ICS Water Supply Group Supervisor
"Triage" ICS Medical Triage Team Leader
"Treatment" ICS Medical Treatment Team Leader
"Transport" ICS Medical Transportation Team Leader

"Morgue" ICS Morgue Team Leader

'Medical	Support"

ICS Medical Support Team Leader

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Radio Call Signs- Incident Command System Continued

Radio Call Signs - Incident Command System - continued

RADIO	CALI	_ SIGN	DEFINITION

"Staging" ICS Level II Staging Manager

"Base" ICS Base Manager

"Systems" ICS HVAC and Utilities Group Supervisor

"Rescue" ICS Rescue Group Supervisor
"Ventilation" ICS Ventilation Group Supervisor

"Sector" (A,B,C,D, or 1,2, etc.) ICS Sector Supervisor

"Suppression" ICS Fire Suppression Group Supervisor
"Air Op" ICS Air Operations Group Supervisor

"Air Attack" ICS Air Attack Group Supervisor (High Rise)

ICS TITLES AND DESIGNATIONS

Once command officers arrive on the scene, they will no longer use their assigned numbers to communicate by radio. When assuming a responsible command position at the scene, they will become known as the appropriate Incident Command System title (Operations, Sector 2, Rehab, etc.) Engine, squad, and truck companies will retain their usual number designations since they are task-level groups, unless assigned to a specific function in which case they may assume the name of the function (ex: ventilation, rescue, attack, evacuation, etc.)

COMMAND VESTS

When personnel are designated to assume specific command positions within the ICS, they shall wear a command vest when availablewhich will designate their responsibility. Vests shall identify: Incident Commander, Command Functions (Planning, Logistics, etc.), Sector (division) Supervisors, Medical positions, and Staff positions (Safety, Liaison, etc.).

COMBINING INTERIOR AND EXTERIOR OPERATIONS

Interior operations are defined as a offensive attack. Exterior operations are defined as defensive application and usually include master streams, although not necessarily. Interior and exterior operations shall not be combined with personnel in the same area. Exterior and interior streams may ONLY be combined when the Incident Commander can POSITIVELY assure that no harm will be done to fire fighting personnel. If a fire becomes exterior, the IC must announce it by radio, and get confirmation from all sectors. The Incident Commander must also announce the exterior mode to Fire Communications on the radio talkgroup "FIRE1". Operating companies, during exterior operations, will automatically reposition outside the collapse zone of the structure and will not re-enter that zone for the duration of the incident or until the mode is judged safe by the Incident Commander and changed back to interior. A exterior mode necessarily assumes that the building is too dangerous and the incident too unstable to attack via the interior.

PASSING-DOWN COMMAND

The Incident Commander may "pass-down" command to a subordinate officer ONLY after the incident is stabilized (fire knocked down, Haz-Mat neutralized, victims rescued, etc.). Pass-down of command must only occur in order to allow the command officer to return to in-service status. The Incident Commander shall initiate pass-down of command by stating to the subordinate officer, "I am passing command to you." The completion of the pass-down of command shall be affirmed by the subordinate officer who shall state, "I have command." After the pass-down of command, the subordinate officer shall utilize all ICS terminology when communicating by radio.

TERMINATING COMMAND

All incidents shall be terminated when the last Incident Commander returns to in-service status. Termination of command will generally be conducted by the last company officer to leave the scene of the incident. However, command officers may terminate command when they plan to return all companies to in-service status immediately. To terminate command, the officer will use the identifier name for the incident and state his intent to terminate command.

Example: "Avery Command terminated, Engine 16 in-service." or "Baptist Command terminated, Battalion 4 in-service."

RECEIVING CALLS THROUGH THE VOCALARM SYSTEM

It shall be the responsibility of the Fire Station Watchman to record, in writing: the address of all calls received through the vocalarm system, and to hand-off that document to the appropriate 1st due Officer riding out of the station. The Officer will refer to the document should further reference be needed.

It shall be the responsibility of all command officers to record, in writing, the address and listing of responding companies on all calls received through the vocal alarm system, and to carry such document with him so that he may know the running order and response of companies to the incident.

NOTE: Calls received by radio DO NOT require such documentation. Also, fire stations equipped with dispatching printers shall carry the printed dispatching information and need not write the information since it is being provided by printer.

The Watchman is responsible for verbally acknowledging receipt of all calls on the Vocalarm system.

RESTRICTING CITY-WIDE RADIO TRANSMISSIONS

In some cases, it may become necessary to restrict radio transmissions on a particular radio talkgroup. In such cases, the Fire Communications Bureau shall transmit on the vocalarm system:

"All personnel on "FIRE1", switch your radios to "FIRE2". Such transmission shall require all fire department radio transmissions, apart from incidents currently working on the radio talkgroup "FIRE1", to be directed to an alternate radio frequency.

At the conclusion of the situation, Fire Communications shall announce on the vocalarm: "Switch all radios back to normal operating frequencies." Talkgroup "FIRE1" or "EMS1".

MEDICAL FUNCTION

The Medical Branch/Group (Radio call "Medical") is established when an incident requires the effective medical care of incident victims and incident fire service personnel. Such care may include evacuation, rehabilitation, triage, treatment, and/or transportation to medical care facilities.

The Medical Group Supervisor shall answer to the Incident Commander under the ICS Structure or to the Operations Commander (if established) and shall coordinate the medical needs of incident victims and incident personnel. The Medical Group Supervisor shall be responsible for establishing the subordinate functions of Rehabilitation, Triage, Treatment, Transportation, and Morgue as needed. The Medical Group Supervisor shall be responsible for the effective coordination, through the incident supervisor (IC or Operations), of medical activities with other operating resources such as fire suppression,

Haz Mat, etc. Requests for additional Medical resources (personnel, equipment) must be made through the Medical Group Supervisor (IC or Operations).

The Medical Branch/Group shall be responsible for determining the need for a Critical Incident Stress Debriefing (CISD) for personnel operating at the incident. The CISD will follow preplanned guidelines and shall be initiated through command approval.

The Medical Group shall be responsible for establishing and maintaining the Rehabilitation Team for personnel operating at the routine incident.

MEDICAL FUNCTION - RADIO PROCEDURES

When the IC establishes a Medical Group, the designated radio channel for group communication will be radio talkgroup "EMS1". In such cases, the Medical Group Supervisor MUST locate at the Operations Post to assure face-to-face communication with the Operations Chief. If the Medical Group Supervisor cannot locate at Operations, then group communications will remain on the assigned fireground talkgroup "GRD" that the incident has been assigned to.

REHABILITATION TEAM

The Rehabilitation Team Leader (radio call "Rehab") is responsible for the effective coordination of the rehabilitation area at emergency incidents. The Rehab Team will follow departmental guidelines for administration of the Rehab Area. The rehab area is the area in which fire personnel receive rest, fluids, and medical monitoring prior to returning to incident operations.

TRIAGE TEAM

The Triage Team Leader (radio call "Triage") when appointed by the Medical Group Supervisor is responsible for the extrication coordination, primary treatment, medical sorting, and tagging of incident victims as to their classification for treatment by the Treatment Section. The Triage Team Leader shall separate victims by utilizing the Simple Triage and Rapid Treatment (S.T.A.R.T.) method.

The first arriving fire private-EMT or fire fighter paramedic is responsible for triage until relieved by another individual of equal or higher qualification. During initial triage, personnel will access the severity of the patient's condition and identify it with the appropriate color ribbon as described on the attached sheet and below. Personnel performing the triage will tie the appropriate color ribbon to the patient's **LEFT** arm or **LEFT** leg in a visible position.

Ribbon Color	Patient Condition
Black	obviously deceased
Red	critical - immediate transport required
Yellow	not immediately life-threatening - may transport later
Green	able to move without assistance

The Triage Team Leader shall keep their supervisor informed regarding the number and extent of injuries, and the additional needs of their area.

TREATMENT TEAM

The Treatment Team Leader (radio call "Treatment") shall administer the immediate and delayed treatment of incident victims and incident personnel prior to their transport to medical care facilities. The Treatment Team Leader shall coordinate the establishment of the treatment area which must be accessible for subsequent transportation of patients. The Officer shall also provide suitable treatment areas according to triage status, expedite treatment and movement of victims, secure the treatment area, establish necessary communication links with medical facilities and Fire Communications, and inform his supervisor regarding transportation and other needs.

TRANSPORTATION TEAM

The Transportation Team Leader (radio call "Transportation") shall be responsible for the transportation of incident victims and fire personnel requiring medical facility care. The Transportation Team Leader shall establish and manage the patient loading area, request appropriate methods of transportation through the proper channels, log the number of patients, log the types of injuries, and log transportation destinations.

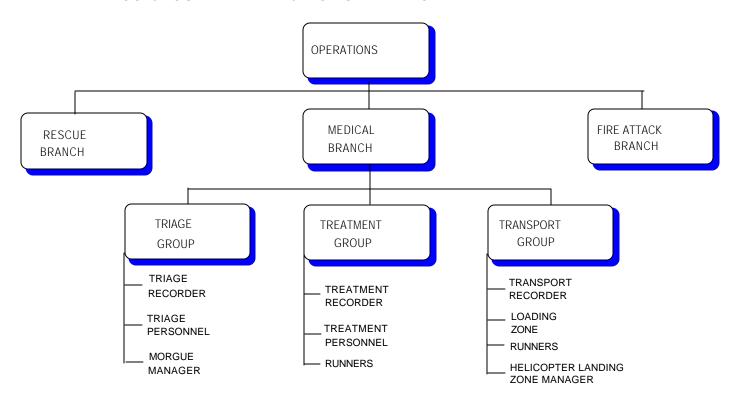
The Transportation Officer shall request transport vehicles (Ambulances, buses, helicopters) through the Medical Group Supervisor so that adequate incident coordination can be maintained.

By necessity, the Transportation Officer will work closely with the Treatment Officer in order to provide effective treatment and communication for incident victims and personnel in need of medical care.

MORGUE TEAM

The Morgue Team Leader (radio call "Morgue") shall be responsible for establishing the morgue area. Incident victims who have died will be temporarily located in the morgue area until arrangements can be made for their transport. The morgue area, by necessity, must be located in an area removed from the medical transportation and treatment areas, and isolated from the public.

MASS-CASUALTY BRANCH ORGANIZATION



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PROTECTIVE CLOTHING

PURPOSE: To afford fire department personnel with maximum clothing protection while performing their duties.

DEFINITION OF FULL PROTECTIVE CLOTHING: Helmet, hood, turnout coat, bunker pants with short boots, gloves, and pass device.

RESPONDING TO EMERGENCIES

Personnel shall wear full protective clothing (gloves, optional) when responding to structure fires, transportation incidents, and hazardous materials calls. On other calls, personnel shall wear protective clothing sufficient to be prepared to operate properly upon arrival. Helmets are optional within closed cabs, and mandatory outside of closed cabs. When personnel choose not to wear the helmet in an enclosed cab the helmet must be secured from being thrown and damaging other equipment. Personnel responding to First Responder calls may elect to place turn-out coat, pants and boots on the equipment before responding. Drivers in closed cabs have the option of wearing protective clothing while driving. Personnel riding within command vehicles and ambulances have the option of wearing protective clothing while responding.

NON-EMERGENCY TRAVELING

Personnel are required to wear a helmet if riding on fire apparatus unless within a closed cab. When personnel choose not to wear the helmet in an enclosed cab the helmet must be secured from being thrown and damaging other equipment. During work activities such as hydrant flushing, personnel may forego wearing of the helmet as long as they are seated and apparatus speed is low.

ON EMERGENCY SCENES

STRUCTURE FIRES: Personnel are required to wear full protective clothing, while operating within the incident perimeter which is bounded by the Command Officer(s). The Incident Commander shall declare when the working area of the incident is safe and therefore modify the clothing requirement. Helmet, bunker pants, boots, and gloves, however, are always required during overhaul operations. Likewise, personnel are always responsible to assume the personal burden of protecting themselves sufficiently against likely hazards to be encountered at emergency scenes, regardless of declarations issued by the IC.

Protective Clothing Continued

EMS OPERATIONS: Personnel are required to wear helmet and tyvac suit, when dealing with transportation incidents, unless approved by the Incident Commander. At EMS medical assistance calls, personnel must wear protective clothing sufficient to protect them during the call (See Emergency Medical Response Protection SOP).

HAZARDOUS MATERIALS INCIDENTS: Personnel are required to wear, full protective clothing while operating within the contamination reduction (warm) zone and hot zone.

It is the personal responsibility of the individual employee and the responsibility of Officers to assure compliance with this SOP.

PERSONNEL ACCOUNTABILITY

PURPOSE:

To account for firefighters at any given time within a small geographic area within the "hazard zone" of an incident.

SCOPE:

All fire division personnel working within an incident zone where SCBA must be worn, a chance of becoming trapped, a confined space rescue, or danger of collapse.

RESPONSIBILITY:

Accountability involves personal commitment to work within the safety system of an incident.

Command considers accountability a vitally important element in strategy and attack planning.

Command will initiate effective risk assessment and maintain an accurate awareness of where resources are committed and initiate an accountability and inventory work sheet

Sector supervisors must maintain an accurate awareness of resources assigned to their sector. All personnel must remain in their sector, unless reassigned or relieved.

All companies work for I.C./sector supervisors-No Freelancing.

All Companies Arriving On The Scene Will Remain Intact unless the work task divides the company into teams, (Trucks, Squads). Teams consist of a minimum of two fire-fighting personnel w/ radio. All companies and teams must have operational radio in the hazard zone.

All Company Personnel Will Enter And Return From Assigned Areas Together! This Includes Rehab!

All company personnel entering the hazard zone or other designated areas must be under the command of a designated supervisor.

Personnel Accountability Continued

PERSONNEL ACCOUNTABILITY TICKETS AND COVERS:

Each apparatus and command car will be outfitted with TWO personnel accountability ticket Company Cards and covers with Velcro backing. Each personnel accountability ticket cover will hold a company roster depicting company assignment and personnel.

At 0700 hours, the company officer shall fill out their personnel accountability ticket rosters for on-duty personnel and place on apparatus. The officer will make any changes immediately that may occur during that shift. The officer shall insert the personnel accountability ticket rosters in the covers and place on Velcro strips provided on the dash of the apparatus, officer's side. Be aware that company positions in the cover must match with the 800 MHz portable radio assignments.

INCIDENT SCENE ACCOUNTABILITY:

All Command Officers shall pass a personnel accountability ticket to the Incident Commander. The second personnel accountability ticket shall be used if the Officer is assigned to any other function of the ICS system.

All supervisors/company officers shall maintain a constant awareness of the position and function of all members assigned to operate under their supervision.

The Incident Commander shall maintain accountability for the location of each company or unit at the scene by tactical worksheet. Sector supervisors are responsible for company location and function by tactical work boards. All first alarm companies must notify the IC/ sector supervisor of their location and function.

Transfer of the personnel accountability ticket covers shall start WITH SCENE ARRIVAL. The IC can appoint an Accountability Officer who shall gather or have a runner gather the first assignment's personnel accountability ticket covers and will assist the IC with the tactical worksheet, benchmarks, and accountability.

Initial Engines shall serve as the primary accountability drop-off points. In most incidents, the accountability Engine will be the Attack Engine. In the case of larger buildings where one drop-off point is not feasible, a later arriving Engine located on another side of the building will assume accountability responsibility for that side of the building until a sector supervisor is established. For the I.C., the arriving company officer shall request orders and inform I.C. that the company officer has accountability for that area.

Personnel Accountability Continued

Should the incident expand in size, Command will provide sector supervisors to all sectors. Companies shall report to the appropriate Branch Director or Sector Supervisor for their tactical function and transfer of the personnel accountability ticket covers. As companies leave sectors, personnel accountability ticket covers must be retrieved by company officers.

ENTERING OR EXITING SECTORS AND REHAB WITHOUT TRANSFER OF Personnel Accountability Ticket COVERS WILL NOT BE ACCEPTABLE.

Each re-assignment of a company (Sector A to Sector B, Sector C to Rehab, Rehab to next assignment) will require transfer of the personnel accountability ticket.

Should a Sector Supervisor enter the hazard zone the personnel accountability ticket covers must remain outside with an accountable person.

The Rapid Intervention Team shall pass their personnel accountability ticket cover to their assigned leader, either the IC, Branch, or Sector Chief, and maintain their readiness to rescue.

Multi-story / high-rise incident procedures require two (2) personnel accountability tickets; one for lobby control and one for staging upstairs. Other operations are covered in the S.O.P's for Control of Fires in High-rise buildings.

If a fire fighter, company, or officer is in trouble or thinks they or their company are heading into trouble, then the use of the universal signal "MAYDAY" shall be sounded immediately over the radio two to three times. Fire fighters should also try to engage the "emergency button" on their radio. This will display "Emergency Received" on the display of all other radios that are on the same talkgroup, and send an alarm to dispatch. All other companies and personnel on the scene must clear the channel immediately to allow the affected parties to give their identity, location, and situation. The Rapid Intervention Team shall monitor normal frequencies at all times in an active incident and respond to the rescue site either by orders or initiative w/ radio confirmation.

The use of "MAYDAY" requires the manual activation of the PASS device by affected parties.

If lost or trapped, affected personnel should try to go to a wall, doorway, or window, and try to assist rescuers by being in a logical search area.

Personnel Accountability Continued

If "MAYDAY" is sounded and actions are taken by the affected parties that removes the trouble, then the affected parties <u>must</u> identify themselves and sound an all clear over the radio to stop rescue efforts. Also clear the emergency on the radio by engaging the "emergency button" for 2 to 3 seconds until a tone is heard.

TACTICAL BENCHMARK:

The personal accountability report (PAR) involves a roll call of personnel assigned to a hazard zone.

A "PAR" is a confirmation that members of a company are accounted for.

For the sector supervisor, a "PAR" is an account for all company members assigned to that sector. A "PAR" will be required for the following situations;

- 1. A report of a missing or trapped firefighter.
- 2. Any change from interior to exterior attack.
- 3. A sudden hazardous event; Flash over, back draft, collapse etc.
- 4. Search crews reporting an "all clear" will also provide a "PAR" for that crew.
- 5. At the report of fire under control.

The Incident Commander can ask for a "PAR" at any time.

Strategies of search and rescue will become a priority should a member become trapped or missing.

Should the operation change from interior to exterior attack or greater alarm, Command will announce the change on all radio frequencies.

Should any sudden event occur that would require the evacuation of personnel, Command will announce the change and a "Par" over the fireground frequency and fire operating frequency and require all manned apparatus to sound their air horns in three long blasts (about ten seconds each air blast). At this time personnel are required to evacuate the hot zone.

RULES OF THUMB:

Personnel accountability ticket covers never enter the hazard zone.

Personnel accountability ticket covers must be maintained at the point of entry to the hazard zone.

Personnel Accountability Continued

Companies must turn in their personnel accountability ticket covers upon entering, and must retrieve them upon exiting from the hazard area.

When the Incident Commander has determined the accountability system is no longer needed, <u>ALL</u> officers must retrieve their personnel accountability ticket covers and place the covers back on the apparatus before returning to service.

DRIVING FIRE DEPARTMENT VEHICLES

PURPOSE: To provide maximum safety to employees and citizens while fire department vehicles are being driven.

NON-EMERGENCY DRIVING: Individuals shall be harnessed (seat belts) and all driving laws obeyed.

The Tennessee State Code requires the operation of headlights on motor vehicles during any rain, mist, or other precipitation (including snow) if it requires the constant use of windshield wipers. Failure to comply is a violation of state statute and could be considered negligence, per se, in a lawsuit against the Fire Department for an accident occurring under these conditions.

EMERGENCY RESPONSE DRIVING: Individuals shall be harnessed and driving speed limited to the road conditions which exist (wet/dry, rough/smooth, heavy traffic/light traffic).

Vehicles shall utilize ALL emergency warning lights and siren.

Vehicles shall completely STOP at all negative right-of-ways (red lights, 2-way stop signs, railroad tracks with lights blinking), and proceed through the right-of-way ONLY after accounting for every lane of cross traffic and any on-coming vehicles.

Vehicles, having the right-of-way, shall approach ALL intersections with a speed which will allow them to stop or avoid collision.

Vehicles shall NEVER pass another responding emergency vehicle without first confirming the forthcoming pass by radio.

It is the personal responsibility of the Driver and the Officer to see that these procedures are observed.

EMERGENCY MEDICAL RESPONSE PROTECTION

PURPOSE: To protect personnel from the possible effects caused by communicable diseases.

When personnel are dispatched to emergency medical calls, they shall wear protective rubber gloves which have been provided by the fire department.

NOTE: Fire personnel should also consider wearing their turnout coat, boots, and helmet in order to protect their own bare skin areas which could be exposed to the contact of the victim's body fluids. EMS personnel should consider wearing protective clothing provided for their use.

At no time should personnel allow the body fluids (blood, saliva, etc.) of the victim to come in contact with their (Fire Department personnel) bare skin. Special caution should be taken to avoid any blood or body fluids contact by the victim to any open cut or sore on the body of the emergency personnel.

When personnel are forced to administer resuscitation to any victim, personnel are to utilize protective devices provided by the fire department in order to avoid contact with saliva and internal fluids of the victim. The resuscitator should be utilized whenever possible in order to avoid personal contact with the victim.

Decontaminating Personnel: Personnel should thoroughly wash their hands and exposed skin areas with soap and water immediately following any EMS call. Personnel should be especially careful NOT to place their hands around their mouths prior to washing.

Cleaning Contaminated Fire Department Equipment: Decontamination of equipment and clothing exposed during EMS calls is accomplished by thoroughly washing the equipment and clothing in a solution of one (1) part household bleach and ten (10) parts water.

Reporting Possible Exposure To Disease: Should personnel determine that they have been exposed to a communicable disease while performing their jobs, they should submit a "Infectious Exposure Report" form (#704) as a permanent record of their exposure.

All employees that enter a structure on a first responder call need to be reminded that there may be a potential for exposure to a contagious disease. To reduce the incidence of actual exposure common sense and proper protective equipment must be utilized when patient contact is necessary.

Emergency Medical Response Protection Continued

Most infectious diseases that the First responder will encounter require intimate contact with the patient. Intimate contact that involves airborne or droplet infection. Intimate is described as kissing the infected person, drinking out of the same glass, using the same eating utensils, or extended periods of time in a confined area with an infected person.

EXAMPLE: An EMT that is in the back of the ambulance, with a coughing patient that is suspected of having Meningitis, is not considered an exposure. Intimate contact would be If the patient were to cough directly into the providers face.

The reduction of contact with patients body fluid is of great importance. This can be accomplished by:

- 1. The use of universal precautions appropriate for the situation.
 - a. Gloves are to be worn on every patient encountered.
 - b. Eye protection is to be worn if there is a potential of body fluid "splashing" or close contact with potential for airborne droplet infection.
 - c. All universal precautions will be taken when there is trauma with large amounts of blood or body fluids.
- 2. At the scene of the First Responder call the senior EMT will be the only person responsible for the assessment of the patient. The other first responding company members will gather information from family or bystanders about the patient's past medical history and / or situation that initiated the call for emergency care. Other members will gather important items, such as, prescription Medusa. If needed, the other members of the first responder team will assist the EMT and unit personnel only after donning the appropriate universal precautions. Examples of manpower needs:
 - b. A critical patient.
 - c. Lifting assistance.
 - d. Any situation that involves multiple patients.

HANDI-TALKIE RADIOS, APPARATUS RADIOS

PURPOSE: To assure that maximum, effective communication is available between Officers, Companies, Emergency Units, and Incident Commanders.

At the beginning of the work day Company Officers shall assure that the handi-talkie Radio is Operational. The radio shall be made ready to use in such a manner so that the Officer's hands are free to work when responding to emergencies (usually with radio in coat pocket or secured by the radio strap). The extension microphone should be used to assist in this procedure. Continuous holding of the radio inhibits the ability of the Officer to work at emergencies.

At the beginning of the work day all officers shall set the frequency of the handi-talkie to "FIRE1".

When responding to an emergency, the standard procedure shall be to turn the handi-talkie "on" before leaving the fire station or responding. This procedure assures that all portable radios responding are automatically regrouped to a common fireground talkgroup "GRD" by the CAD and Motorola radio system while traveling to the scene. Should personnel desire to transmit on the "FIRE1" talkgroup (i.e., to disregard other companies) merely rotate the talkgroup selector knob to the last talkgroup position #16 (REGRP) and then rotate the knob back to the first talkgroup #1 (FIRE1) and talk to the dispatcher. To rejoin the fireground talkgroup again, merely rotate the talkgroup selector knob to the last talkgroup position #16 (REGRP) and you will rejoin your fireground talkgroup.

At the beginning of the duty day, all portable radios shall be secured so that it is protected from potential damage while positioned upon the apparatus. The Officer shall assign authority for compliance to this procedure to an employee(s) or the Officer shall assume the responsibility personally.

NOTE: Battery life for a fully charged handi-talkie battery is approximately 8 to 12 hours, before needing recharging. This time frame depends on the age of the battery and operating conditions. Batteries on radios that are capable of scanning, and are left in the scan mode will require charging more often. During extended operations, fresh batteries can be secured from the Air Mask Service Truck. Multi-Pocket chargers have also been purchased for each Fire Station.

APPARATUS RADIOS: The standard response frequency for apparatus shall be radio talkgroup "FIRE1". Ambulances - radio talkgroup "EMS1".

Handi-Talkie Radios, Apparatus Radios Continued

LEVEL I STAGING - Apparatus shall remain on radio talkgroup "FIRE1" until they announce their arrival on the scene (disposition, etc.). The Driver of the apparatus will communicate with his portable radio on the fireground talkgroup "GRD" that has been assigned to the incident with the officer or Incident Commander. The Incident Commander will report the use of all hose lines to Fire Communications on talkgroup "FIRE1" if it is being used as the primary dispatch talkgroup.

LEVEL II STAGING - Apparatus shall remain on radio talkgroup "FIRE1". The Driver of the apparatus will communicate with his portable radio on the fireground talkgroup "GRD" that has been assigned to the incident with the officer or Incident Commander.

NOTE: EMS Personnel will use their hand-talkie radios on the assigned fireground talkgroup "GRD" to communicate with the Incident Commander when working with fire crews.

AIRMASK POLICY / FIRE HOOD / PASS DEVICE





PURPOSE: To provide personnel with maximum respiratory protection against smoke and toxic gases during emergency incidents.

It is mandatory that all personnel responding to structural fires (confirmed and unconfirmed), hazardous materials incidents, or any incidents of unknown nature, unusual odors, etc. must don their SCBA tanks according to departmental training policies, prior to entering the working (hazardous) area of the incident. Personnel should have SCBA available for immediate use when leaving apparatus.

HAZARDOUS MATERIALS INCIDENTS: No individual may enter any area, enclosure, or structure to size-up or control any hazardous material incident without the full SCBA being worn. SCBA shall be worn by all personnel within the incident perimeter contamination reduction (warm) zone and hot zone.

FIRES - STRUCTURES, DUMPSITES, DUMPSTERS: No individual may enter any area or structure for the purpose of fire fighting, search/rescue, or property conservation (salvage) without full SCBA being worn. SCBA shall be worn by all personnel within the incident perimeter (area bounded by the Incident Command Officer(s)).

OVERHAUL: No individual may enter any area or structure to perform overhaul functions without full SCBA being worn, unless the environment has been declared safe from toxic elements by the Incident Commander.

It is the personal responsibility of each employee to comply with this standard operating procedure. Additionally, it is the responsibility of all Officers to assure that they and their subordinates comply with the procedure.

Airmask Policy / Fire Hood / PASS Device Continued

Proper Wearing Of Fire Hoods

The fire hood should be worn on the outside of the face piece webbing. The proper procedure for wearing of the hood is:

- 1. Put the hood on prior to donning the turnout coat.
- 2. Don the turnout coat. This step best assures maximum neck protection.
- 3. Pull the hood down, off the head, with hood now around the neck.

When donning the face piece of the air mask:

- 4. Don the face piece and adjust the webbing straps to assure the seal.
- 5. Pull the hood up to cover the head and the webbing.
- 6. Put on the helmet and tighten the chin strap to secure the helmet.

NOTE: Wearing of the hood under the face piece webbing causes the hood to fit too tightly to the head, face and ears, minimizing the air space around the ears and increasing the likelihood of heat conduction through the hood. This also compromises the sealing capability of the face piece.

PASS Device:

Personnel shall not operate within or enter into any hazardous atmosphere without activating the $\underline{\mathbf{P}}$ ersonal $\underline{\mathbf{A}}$ lert $\underline{\mathbf{S}}$ afety $\underline{\mathbf{S}}$ ystem (PASS Device). Personnel $\underline{\mathbf{m}}$ ust ensure the PASS Device is fully operational prior to entry.

Battalion Chiefs are the only authorized personnel to make battery exchanges on the Super Pass Units. The record of any battery exchanges shall be forwarded to the Safety Commander.

If a PASS unit has tar, or other matter on its surface, a small amount of lighter fluid is the only authorized cleaning material to be used. After cleaning the PASS unit, be sure to wipe it down with a damp cloth.

For assistance, contact the Safety Commander.

FIRE OPERATION MODES - interior, exterior

PURPOSE: To clarify the various modes of fire fighting operations and the respective actions expected of personnel.

INTERIOR ATTACK - Quick, aggressive offensive operations.

This mode is the standard, expected fire fighting mode in which personnel will initiate an aggressive attack by advancing hose lines inside of the building to the base of the fire. The interior mode will always be in effect unless altered and announced by the incident commander. The interior mode assumes that the fire building is relatively safe, both structurally and from a fire fighting or hazardous materials perspective.

In all fire incidents in which the operation mode is INTERIOR, the attacking engine company(s) shall attack the fire from the best advantage so as to afford maximum survivability to potential victims, and control the fire with maximum effectiveness. The SECOND (2nd) ENGINE COMPANY shall initiate PRIMARY SEARCH procedures in the fire building and be primarily responsible for the systematic search process, unless ordered otherwise by the Incident Commander.

EXTERIOR ATTACK - Surround and drown, outside the collapse zone.

This mode must be announced by the incident commander and confirmed by responding Companies. The exterior mode will be established when the fire building becomes too dangerous to enter and/or if the fire has advanced beyond the ability of responding companies to effectively control. Once the exterior mode is declared, all companies shall position apparatus and personnel OUTSIDE the collapse zone of the fire building.

NOTE: The collapse zone of the building is generally defined as the distance away from the building equal to the height, however in very tall buildings (4+ floors) the Officer must judge the relative safe distance and position reasonably. Building corners are generally the safest point of location. The primary tactic during exterior modes will be to protect exposures and then to control/extinguish the fire. During exterior operations, no personnel or apparatus shall be placed within the collapse zone of the fire building until the relative safety of the building has been assessed and the incident commander has declared the fire building safe for such placement.

NOTE: At no time will exterior streams be combined with an interior operation. While interior operations are in progress, no water will be applied from exterior positions.

EXCEPTIONS: Exterior streams may be used to control a fire in the area of a building while interior firefighters operate in a separate area of the same building.

SEARCH AND RESCUE

PURPOSE: To safely locate, protect, and remove incident victims.

DEFINITIONS: PRIMARY SEARCH - A Quick initial search of the immediate and

adjacent fire areas. Limited only by fire intensity.

SECONDARY SEARCH - A thorough, complete search of the affected fire building. Leave nothing unsearched.

STRUCTURAL FIRE RESPONSE (Commercial and Residential)

After a PRIMARY SEARCH is completed, the Primary Search Officer shall communicate to the Incident Commander: "Primary Search, All Clear." Should a victim(s) be located, the Officer shall initiate rescue and notify the IC who shall coordinate victim removal and treatment. Again once the search process is completed the Officer shall communicate "Primary Search, All Clear." The phrase "Primary Search All Clear" shall indicate that the primary search benchmark has been reached and shall be communicated by the IC to alarm.

After the Primary Search is complete, the Company Officer will ask for further orders from the Incident Commander.

In situations in which the fire is declared EXTERIOR by the IC, NO PRIMARY SEARCH WILL DE INITIATED. The declaration of the fire as exterior will indicate to Fire Communications that no primary search will be done.

When the fire has been effectively controlled within the fire building and the entire building can be thoroughly searched, the Incident Commander will order that a SECONDARY SEARCH be initiated by selected fire companies. A Search Officer(s) will be designated by the Incident Commander. The Search Officer will coordinate the secondary search and report the status of the search to the Incident Commander.

Upon completion of the SECONDARY SEARCH, the Search Officer will communicate to the Incident Commander: "Secondary Search, All Clear," in order to indicate that the secondary search benchmark is completed. This message will also be communicated by the IC to alarm.

The Company Officer(s) will then ask for further orders.

Search and Rescue Continued

Transportation, Industrial, Trench, Etc. Rescue

Incidents involving more than one (1) unit or company shall be coordinated through an incident commander. When the victim(s) are extricated the Incident Commander shall communicate to alarm, "Rescue, All Clear," to indicate that rescue is completed.

Hazardous Materials Incident Search / Rescue

Haz-mat incidents pose unique rescue problems. Thus, search / rescue procedures shall not be initiated until the involved materials can be identified, the relative safety to fire personnel assured, and incident perimeters established. The Incident Commander shall order the initiation of search / rescue operations at all haz-mat incidents. Once search / rescue procedures are initiated, the above listed radio messages shall apply to indicate search / rescue completion.

Complex Rescue Situations (Multiple Victims)

In situations where search / rescue requirements are large, the Incident Commander shall create a RESCUE GROUP and appoint an Officer to coordinate that group. The Rescue Group shall be responsible for completing the entire search/rescue operation. A Rescue Group will likely be established during incidents involving: high rise, air crash, apartments, large-scale transportation.

Medical Care For Victims

When victims are located at incidents and require medical care, the Incident Commander shall establish a MEDICAL GROUP and appoint someone to coordinate that sector. The Medical Group shall be responsible for the triage, treatment, and transport of incident victims. The IC shall assign units and companies to the Group and they shall answer to the designated Group supervisor. In most cases the Medical Group supervisor shall be an EMS Supervisor. Transfer of command may take place within the Medical Group if required, but must follow standard procedures for command transfer. The Medical Group Officer shall assume the title "MEDICAL GROUP" in communicating with the Incident Commander. Requests for additional resources (manpower, units, etc.) must proceed through the IC. EMS Personnel shall monitor the assigned fireground talkgroup "GRD" when at a fire or rescue incident. (See Medical Function-Radio Procedures in the Incident Command Procedures)

Search and Rescue Continued

Incident Commander - Calling For Emergency Units

When the Incident Commander must request one or more Emergency Units (ambulances) for an incident, the IC shall call for the number of Units required and designate who is injured.

Example: Dispatch One Unit For A Civilian," Or "Dispatch One Unit For A Fire Fighter."

BUILDINGS ON FIRE - VACANT, UNDER DEMOLITION, UNDER CONSTRUCTION

PURPOSE: To assure the safety of personnel during fire operations at structures which are vacant, under demolition, or under construction.

Immediate Quick Interior Fire Attack Shall Not Be Made, Until The Relative Safety Of The Interior Can Be Confirmed, Entry To The Interior Shall Be Ordered Only By The Incident Commander.

Interior operation shall occur only after the fire has been knocked down or controlled from the outside of the building and/or a careful check has been made on the condition and relative safety of the interior. Once the safety of the structure is assured, the incident commander shall authorize entry to the interior.

FIRE IN ATTICS INVOLVING BUILDINGS WITH LARGE, UNSUPPORTED AREAS

Serious attic fires involving buildings with large, **UNSUPPORTED** areas shall be fought from the exterior of the building. The Incident Commander shall declare an exterior attack upon receiving information or determining the existence of a serious fire condition in the attic space of a building with a large, unsupported area. All personnel on the scene are responsible for immediately communicating to the Incident Commander any information regarding a serious attic fire condition.

CONTROLLING FIRES IN ELECTRIC SUBSTATIONS

PURPOSE: To assure the safety of fire personnel.

When fire officers determine that a fire is located in an electric substation, the officer should request Memphis Light Gas and Water to respond to the scene.

Under no circumstances should firefighting personnel enter an electric substation unless the area has been deemed safe by an employee of Memphis Light Gas and Water.

If equipment is on fire:

- 1. Set up Lightwater Operations.
- 2. Request Haz-Mat team to respond.
- 3. Extinguish fire using extreme caution as large amounts of mineral oil used to cool this equipment may become involved.

Note: The mineral oil used may have already reached it's flash point!

ENGINE COMPANY OPERATIONS

Pre-Connect And Booster Hose Use In Structure Fires

PURPOSE: To assure the maximum level of protection for fire personnel and fire victims.

FIRE OFFICERS SHALL USE THE 13" SIZE HOSE LINE OR LARGER ON ALL STRUCTURE FIRES IN WHICH THE STRUCTURE IS INVOLVED WITH FIRE.

THE ONE-INCH BOOSTER HOSE MAY BE USED IN SITUATIONS IN WHICH TRASH, BEDS, FURNITURE, ETC., ARE BURNING WITHIN A STRUCTURE AND WHERE THE STRUCTURE IS NOT INVOLVED.

The threat of FLASHOVER occurring within structure fires presents a very real and volatile danger to fire fighters and victims. The ONLY protection against flashover is a high GPM capability which will quickly cool a super-heated environment. The one-inch Booster hose is restricted to the areas identified above.

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INVESTIGATIONS OF FIRE SCENES / COMPANY PROCEDURES

PURPOSE: To maintain fire scene integrity and responsibility for the Investigation.

Once the fire is knocked down, no debris, furnishings, or other interior materials shall be removed until the scene has been investigated and a determination of "point of origin and cause" has been made.

Extinguishment efforts must be attempted which will leave furnishings and materials in place until the investigation is complete.

It is the responsibility of the company officer in the fire area to advise the incident commander of fire knockdown in that area so that the investigation can be initiated, and to preserve the fire area for the investigation process.

The Incident Commander Is Required To Determine The Cause Of All Fires. Every reasonable effort must be made to determine the cause and origin by the Incident Commander. Responsibility for determining cause and origin shall not be delegated to subordinate officers. The Incident Commander shall not, delegate the responsibility for completing the incident report to another officer. The Incident Commander shall sign all forms on the bottom block of the Incident Report to indicate who filled out the NFIRS report.

Battalion Chief's are responsible for receiving all Fire Incident reports and ensuring the report is properly coded. Battalion Chief's signature and assignment will be written in the bottom block. By 1300 hours the following day; the Incident Report is to be placed in the mail box for Fire Investigation and a copy in Fire Communications. These boxes are located just outside the Division Chief's office at Armour Center.

The assistance of a "Fire Investigator" shall be requested by the existence of one or more of the following conditions:

01. The ignition factor and area of origin cannot be determined by the Incident Commander.

If the initial Lieutenant/Company Officer is the Incident Commander, and is unable to determine the ignition factor and area of origin the Battalion Chief will be requested to report to the scene. The Battalion Chief will assume command and attempt to determine the ignition factor and area of origin. If the Battalion Chief cannot determine the ignition factor and area of origin, the Battalion Chief will authorize a Fire Investigator to be called to the scene. All Officers will remain on the scene until the Fire Investigator arrives and will assist the Investigator in determination of the cause and origin.

Investigations Of Fire Scenes / Company Procedures Continued

- 02. Children playing with fire.
- 03. Burned victims whose burns resulted from direct flame contact.
- 04. Fire fatalities.
- 05. Witness testimony indicating a person allegedly responsible for damaging any structure or property by fire.
- 06. Evidence of arson. (See exceptions)
- 07. Evidence of an attempt to damage any structure or other type property by fire regardless of whether an actual fire resulted. (Incendiary devices or liquids that have not ignited).
- 08. Violent or impending violent situations (Signal C).

Exceptions: In the exceptions listed below the Fire Investigator should be contacted and informed of the details of the incident, unless the Incident Commander determines a need to contact the Fie Investigator. They will decide, at that time if the Fire Investigator needs to make the scene or handle at a later date.

- 1. A vehicle fire when there is no suspect on the scene
- 2. A minor structure fire in a vacant building (no one living in building) when in the judgment of the Incident Commander, the scene does not need to be preserved.

In Cases Where Fatalities or Evidence of Arson Are Encountered, The Fire Scene Must Be Secured As Early As Possible. After fire knockdown, fire personnel and all other people must vacate the fire area until an investigation can be completed. The Incident Commander shall secure the scene by leaving two or more firefighters in the fire area with a hose line with which to extinguish spot fires. Additionally, fire personnel will be assigned at all entry points to the structure to assure that no unauthorized personnel enter the structure until the investigation is complete.

An incident report is required to be completed under the following conditions:

- 01. Fire related damage to any structure, property, or land.
- 02. Any attempt to damage property by fire even if no fire existed. (I.E. flammable liquid poured on or around a structure, automobile, or other property.
- 03. Fire related damage to any structure or property even if the fire was out on arrival.
- 04. Any burned victim whose burns resulted from flames.
- 05. Anytime damage to property is necessitated by fire companies.

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HAZARDOUS MATERIALS / COMPANY RESPONSE PROCEDURES



PURPOSE: To assure the maximum safety of personnel during responses to known hazardous materials incidents.

Companies will be notified of the existing weather conditions by Fire Communications. Companies will approach the incident from the "UPWIND" direction.

No Fire Department Personnel Are To Approach A Known Hazardous Materials Area Without First Identifying The Materials And Determining The Relatively Safety Of The Area.

Companies will stop apparatus well away (200'- 500') from the incident scene to determine the relative safety of approaching the incident area. The first arriving company will radio their position and status. Later arriving companies will radio their position and await orders from the incident commander.

The first arriving officer (Incident Commander) will attempt to safely isolate the immediate area, evacuate the immediate area, and identify the materials involved WITHOUT COMPROMISING THE RELATIVE SAFETY OF FIRE PERSONNEL AND CIVILIANS. The Officer should utilize the Public Address system on the apparatus and order all people away from the area. Persons with incident knowledge should be asked to report to the apparatus in order to determine from them, if possible, the nature of the materials. Should no knowledgeable person be found in the immediate area of the incident, the officer should attempt to identify the materials WITHOUT UNNECESSARY APPROACH TO THE IMMEDIATE AREA. If necessary, the officer should await the arrival of binoculars with which to view the area.

Hazardous Materials / Company Response Procedures Continued

The Incident Commander shall establish a Command Post from which to direct the on-going operations. The Incident Commander shall establish a Level II Staging Area from which to deploy apparatus. The Staging Area for most incidents should be at least ¹/₂ mile from the incident according to Federal Laws.

The incident will be stabilized according to the options available to the incident commander. In many cases, ISOLATION and NONACTION will comprise the roll of the fire department. The Incident Commander shall ask that the responsible shipper or company request the response of a hazardous materials clean-up company. Should the shipper or company refuse that request, the Incident Commander shall request such clean-up company be dispatched. Notification of EMA will also be made.

Necessary authorities (Police, Health, TEMA, etc.) shall be requested through Fire Communications. Area evacuation shall be coordinated through the IC until the incident is concluded.

NOTE: Fire stations may be considered for small numbers of evacuees.

Refer to haz-mat training bulletins for specific incident situations and procedures.

AIRPORT FED-X RESCUE EQUIPMENT

PURPOSE: To incorporate Federal Express air rescue equipment into response in an efficient, prudent manner.

Air Response Incident on Property

- Alert 1 Federal Express apparatus stand-by in house; engine running; radio on.
- Alert 2 Runway 9-27: Federal Express apparatus locate at "P" (papa) and "V" (victor). Runway 18L-36R: Federal Express apparatus locate at A-25; best route "V" to "R" to "BB" to A-25 ramp.
- Alert 3 Federal Express apparatus respond to site of actual emergency and report to A-1 for orders.

Federal Express Property (Airport) Response:

Federal Express apparatus, having all monitoring and computer printouts, will be first on the scene. Federal Express apparatus will determine the nature of the incident, take appropriate action as obligated by their company, and report their situation by Fire Department radio talkgroup "FIRE1" to A-1. A-1 having governmental jurisdiction, will decide the appropriate response and procedures thereafter.

Air Rescue Incident, Off Property:

Federal Express apparatus should never leave airport property such as A-5. Federal Express apparatus with the remaining Memphis Fire Service apparatus shall establish a temporary air group to maintain Memphis International Airport's (M.I.A.'s) flight integrity.

Fire Communications:

Communications will not accept a disregard of Memphis Fire services companies from the Federal Express apparatus; A-30, A-31 and so on. Information from the Federal Express group is to be passed on to A-1.

STAGING OF PERSONNEL AND APPARATUS AT INCIDENTS

PURPOSE: To afford the incident commander the ability to properly organize the emergency scene, and to allow apparatus to reposition effectively.

NOTE: This procedure shall not apply in incidents where designated Set-ups have been established.

LEVEL I STAGING (NO STAGING AREA) - To be used on all 1st alarm responses by Companies. The 1st and 2nd Engine and 1st Truck company will begin work according to standard procedures and the action plan ordered by the incident commander (Co. officer, Battalion Chief, or Division Chief). Later arriving companies shall locate so as to reposition their apparatus if needed. Company Officers will contact the Incident Commander on their Handi-Talkie fireground talkgroup for orders. Ex: "Command, Engine 10, Orders?" If ordered to "stand by", later arriving companies will remain intact at or near their apparatus awaiting orders for deployment. In most cases, officers will be contacted by radio when ordered into the operation. If the incident commander is the 1st arriving officer, one must remember that later arriving companies are not going to deploy without an order, so be sure to have an action plan in mind.

NOTHING SHOWING MODE - In situations where the first arriving company reports "Nothing Showing", the same procedure as listed above shall be used. Later arriving companies shall await orders by the Incident Commander before deploying.

LEVEL II STAGING (DESIGNATED STAGING AREA) - This is a designated staging area which has been established through the Incident Commander. The Incident Commander must determine the number of fire companies to be staged. Example: 2nd alarm or 2 engines, 1 truck. Fire Communications shall automatically dispatch a Battalion Chief who, upon arrival, shall assume command of the Staging Area from the Staging Manager. Companies responding to Level II Staging will monitor their portable radios to the assigned fireground talkgroup "GRD" after reporting at staging. The 1st Driver to arrive in staging will assume the role of Staging Manager and document apparatus available to the incident. Later arriving companies will report to the Staging Manager face to face. The Staging Manager must monitor both radio talkgroup "FIRE1" and the assigned fireground talkgroup "GRD" in order to communicate with Fire Communications and the Incident Commander. As apparatus is ordered into the incident, the Staging Manager will inform Fire Communications on radio talkgroup "FIRE1" what equipment has been sent to the incident. The Staging Manager will assure that the proper level of fire companies is maintained in staging until the Incident Commander places the incident under control. Such confirmation allows Fire Communications to monitor apparatus levels remaining in Staging.

Continued - next page

Staging of Personnel and Apparatus At Incidents Continued

LEVEL II STAGING (DESIGNATED STAGING AREA) - Continued

Should the Driver, acting as Staging Manager, be ordered into the incident, another Driver shall assume the role and continue the staging operation and documentation until relieved of command. The Staging Manager's radio designation shall be "STAGING". All personnel must stay on apparatus until orders are given.

FIRE ALARM REPLENISHMENT OF LEVEL II STAGING - Once Level II Staging is established, Fire Communications will continue to automatically replenish the Staging Area with Companies until the incident is declared under control. When a greater alarm assignment of Engines is achieved, Fire Communications will advise the Incident Commander that the incident is now an SOP "2nd Alarm".

Example: "Madison Command, be advised that the incident is now a 2nd Alarm".

If the incident escalates to an SOP greater alarm, Fire Communications will ask the Incident Commander if Staff Personnel are to be notified? If the Incident Commander request Staff be notified, Fire Communications will initiate a multiple alarm page notifying all call-in staff personnel to respond. The Deputy Director, Chief of Operations and Safety Officer are notified on all SOP multiple alarms no matter if Staff is requested or not.

NOTE: Companies awaiting deployment must be patient and remain ready as a Company. If the Company is staged, get your equipment ready (airmask, tools, etc.) and wait until ordered to deploy.

REHABILITATION OF PERSONNEL AT INCIDENTS (rehab sector)

PURPOSE: To ensure that the physical and mental condition of members operating at the

scene of an emergency or a training exercise does not deteriorate to a point that affects the safety of each member or that jeopardizes the safety and integrity of the

operation.

A REHAB SECTOR is an area established by the Incident Commander during an incident where personnel receive necessary rest, nourishment, comfort, and medical evaluation to properly ready them for another work cycle. It is necessary for the effective safety monitoring of personnel.

The Incident Commander will establish a REHAB SECTOR when conditions indicate that rest and rehabilitation is needed for personnel operating at an incident scene. This shall apply to all emergency operations where strenuous physical activity or exposure to heat or cold exist.

The Incident Commander shall consider the circumstances of each incident and make adequate provisions early in the incident for the rest and rehabilitation for all members operating at the scene. These provisions shall include: medical evaluation, treatment and monitoring; food and fluid replenishment; mental rest; and relief from extreme climatic conditions and the other environmental parameters of the incident. The rehabilitation shall include the provision of Emergency Medical Services.

Rehabilitation should be considered by staff officers during the initial planning stages of an emergency response. However, the climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehabilitation Area. Any activity/incident that is large in size, long in duration, and/or labor intensive will rapidly deplete the energy and strength of personnel and therefore merits consideration for rehabilitation.

Companies should be sent to REHAB as a company and remain together in Rehab. When the company has been released from REHAB, the company officer will notify the Incident Commander (or OPERATIONS if established) that they have been released from Rehab.

Rehabilitation Of Personnel At Incidents Continued

CALLING FOR REHAB:

When Rehab is called for, the following guidelines shall be followed:

- 1. The Incident Commander will advise the location where Rehab is to be established, and if a MATA / Fire bus will be needed due to climatic conditions. (*See The High-Rise Plan for establishing Rehab During a High-Rise fire*).
- 2. Fire Communications will dispatch one Emergency Unit specifically for Rehab, if one has not already been assigned this duty. The weather conditions will be given to the Emergency Unit responding. The Emergency Unit Supervisor will be dispatched/notified that Rehab has been established.
- 3. The Firefighter Paramedic will be designated as the Rehab Officer after arriving on the scene and establishing a Rehab area. The Rehab Officer will report directly to the Incident Commander. Additional Units may be requested through the Incident Commander depending on the amount of medical care required in the Rehab Sector.

REHAB OFFICERS RESPONSIBILITIES:

The REHAB OFFICERs (Firefighter Paramedic) responsibilities will include the monitoring and documentation of all vital signs and general clinical appearance of fire fighters sent to Rehab. At this time the parameters for determining the ability of fire fighters to return to active suppression activities will be left to the discretion of the Rehab Officer. The guidelines should be consistent with those that would be used to determine the general welfare of any patient. A base line should be established to determine the fire fighter's improvement status. If any irregular signs are noted, proper treatment should be initiated and transportation provide by another Unit.

The Fire Division's Medical Director recommends that particular attention must be directed to the fire fighter's heart rate and oral temperature. After 10 minutes of rehabilitation, firefighters with pulse rates greater than 120 or oral temperature greater than 100.6 F, should remain in REHAB for continued evaluation. Firefighters should be reassessed every 10 to 20 minutes and returned to firefighting duties once the heart rate and oral temperature return to normal limits. Firefighters that maintain pulse rates greater than 120 or temperatures greater than 102.0 F for longer than 50 minutes should not return to firefighting activities and should be considered for an emergency facility evaluation.

ENGINE COMPANY OPERATIONS - Interior Mode - (1 3" attack concept)

Company officers should realize that the <u>quick attack and supply line concept is only one of several fire fighting options available to the Memphis Fire Department</u>. Good sound judgment and decision-making still require an Engine Company officer to properly size up before deciding among available options when initiating any hose lay. The use of the 1 3" attack concept was never intended to be the standard tactical operation for an Engine Company in all situations. Engine Companies responding are still required to lay out and connect to water sources if the size and intensity of the fire so dictates.

Thus, when the 1st arriving Engine Company Officer selects the 13" quick attack concept, the following procedure shall apply:

1. The 1st arriving Engine Company shall initiate quick attack utilizing a minimum of a 1 3" hose line. The officer on the 1st arriving Engine Company shall advise the 2nd due Engine the need for a supply line.

NOTE: If the 1st due Engine Company lays its own supply line, a GATE VALVE shall be placed on the 4 ½" plug outlet before water is turned in. The gate valve enables a later arriving Engine Company the ability to connect to the hydrant without shutting down the water supply. Please note, however, that a single supply line directly off the hydrant seriously limits the water flow capability of the hydrant and/or fireground operation.

- 2. When so ordered, the 2nd arriving Engine Company shall be responsible for laying a supply line(s) from the attack Engine Company to the closest available hydrant. The Engine Company shall then connect to the hydrant and initiate pumping. Supply lines shall be a minimum of 2½" diameter. The Engine Company pumping the supply line(s) should maintain adequate pressure to support the attack operation.
- 3. Later arriving Engine Companies (3rd Engine, 4th Engine, etc.) required to support the operation are responsible for laying out to an available hydrant in order to ensure multiple water sources.

Engine Company Operations - Interior Mode Continued

2nd Arriving Engine - Operations (Supply / Search-Rescue)

The 2nd arriving Engine (Supply Engine) will be responsible for maintaining the water supply of the 1st Engine, unless ordered otherwise by the incident commander. Therefore, the 2nd arriving Engine should approach the scene and position the apparatus in such a way as to gain access to a fire hydrant. In some cases the 2nd Engine will not be able to access a fire hydrant by passing the 1st Engine. In this instance, this will require the apparatus to back into position.

Anticipated water flows of less than 500 GPM (< 500GPM) will require one (1) 2 ½" supply line. Water flows of 500-1000 will require two (2) 2 ½" supply lines. Water flows of 1000-1500 will require three (3) 2 ½" supply lines. AT NO TIME WILL THE 1ST ENGINE BE ALLOWED TO RUN OUT OF WATER.

When laying supply lines, the Driver and Assistant Driver shall carry out the order, and the officer and fire fighter(s) shall report to the incident commander for orders. Should the officer be ordered to lay additional hose lines to the fire, the hose will be laid off of the 1st engine (attack engine). If no additional hose is to be laid, the Officer and Fire Fighter shall conduct their required search/rescue within the building.

3rd Arriving Engine - Operations (Support / Sprinkler Supply)

The 3rd arriving engine shall have the primary responsibility of supplying the sprinkler system when the structure possesses a system. The Officer will report such intent to the Incident Commander and suggest other support activities which one deems necessary (laying out, water supply, search, etc.).

Engine Company Operations - Interior Mode Continued

Where no sprinkler system exists, the 3rd arriving engine, unless otherwise ordered, should attempt to position itself on the opposite side of the building from the 1st arriving engine. The officer will evaluate the situation in that sector and report ones findings to the incident commander or the sector commander (if the fire is sectored). The officer will initiate operations in that sector when ordered. The operations of the 3rd arriving engine will generally require they maintain their own water supply (laying out to plug) unless the water supply can be gained from the 1st or 2nd engine.

SUMMARY: 1ST ENG.-ATTACK, 2ND ENG.-SUPPLY, 3RD ENG.-SUPPORT.

PUMPING PRE-CONNECTS WHILE SUPPLY LINES ARE BEING LAID

PURPOSE: To provide Engine Drivers with a guideline by which to pump pre-connect lines prior to a continuous water supply.

Drivers and Officers should be aware that when they are attacking a fire with pre-connect lines and awaiting continued water supply via supply lines, they are essentially in a "holding action" to prevent further spread of the fire or to protect exposures. Thus, in such situations, there is a need to limit GPM flows until the supply lines are charged.

Suggested GPM flows during "holding actions" should be limited to approximately 100 GPM through each pre-connect line. Consideration may be given to utilizing one (1) preconnect and one (1) booster line in order to minimize water flows, rather than flowing two (2) pre-connects off of the tank water. The second preconnect can then be used when the supply line is charged and continued water supply assured.

To assist drivers in their pumping responsibilities, the following chart is provided to illustrate a simple "rule of thumb" approach to pumping preconnects. Assuming that the preconnect length is 200', Drivers can easily remember that pump pressures of 100, 150 and 200 psi provide respective water flows of approximately 100, 150, and 200 GPM, for SM-20 nozzles.

PUMPING 200' PRE-CONNECTS - (1.75" HOSE - SM-20 NOZZLES)

PUMP PRESSURE	APPROX. GPM	ACTUAL GPM
100 psi	100 gpm	80 gpm
150 psi	150 gpm	155 gpm
200 psi	200 gpm	210 gpm

RULE-OF-THUMB FOR DRIVERS (When pumping in a "holding action")

Prior to supply line - Pump 100 psi.

After supply line - Pump 150 psi. (or more if desired)

TRUCK COMPANY OPERATIONS - Interior Modes.

PURPOSE: To guide truck company operations during 1st alarm response.

NOTE: These procedures WILL NOT apply in those cases where a predetermined setup has been designed, or in those instances where company officer's determine they must act independently from them because of circumstances unique to the situation.

1st Arriving Truck Company - Positioning

SMALL RESIDENTIAL AND COMMERCIAL STRUCTURES - The 1st arriving truck company will position itself so as to not block access to the building but to afford it strategic operative advantage for the removal of ground ladders, tools, and equipment. Such positioning should also take into account the use of the aerial for roof access, if necessary. Truck positioning should NOT impede the attack area of the engine company.

LARGE RESIDENTIAL, APARTMENTS, AND COMMERCIAL STRUCTURES - The 1st arriving truck company will position itself in such a manner so as to support the attack through forcible entry, ventilation strategy, and laddering. Such positioning should assume that the aerial will be used for roof access. Again, such positioning should not impede the attack area of the engine company.

WATER TOWER POSITIONING - In cases where the aerial is to be positioned for use as a water tower, the truck should be located ahead of the fire travel (unburned portion of bldg.). The Aerial should be reasonably located OUTSIDE the collapse zone of the building, preferably at the corners of the structure.

Truck Operations - One (1) Truck Response

Truck personnel have a number of tasks to accomplish during fire operations. By necessity they must divide into two (2) teams - inside and outside.

The INSIDE team composed of the Officer and 1 fire fighter (little ladder man - LLM) must gain entry to the building, assist in conducting a primary search for victims, and be available to the engine attack team to assist in the pulling of ceilings, walls, and checking other fire travel avenues.

1. The first job of this team must be to gain primary entry to the building for the engine company. The Officer should take one (1) ax.

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Truck Company Operations - Interior Modes Continued

- 2. Once entry is achieved, the second job of this team shall be to conduct a quick search of the fire area and adjacent areas for victims. They will then assist the Engine Company with fire control and extinguishment.
- 3. When the fire is controlled, the Truck Officer will coordinate the task of property conservation (salvage). The Truck Officer will assure that property losses are minimized as much as possible.

The OUTSIDE team composed of the ventilation man and utility man has the responsibility of raising the ventilation ladder, vertical ventilating, cutting utilities, laddering the building, and property conservation (salvage).

The outside team, upon arrival on the scene shall perform the following: Both men will don SCBA, one man will get the ventilation saw, the other man will get an ax and pike pole; both men will get the ladder needed for ventilation and raise the ladder to the roof; the ventilation man will take the saw and go to the roof to ventilate; The utility man will either take ones tools to the roof and assist ventilation or drop the tools and go cut the utilities.

NOTE: If the Truck Company is supplied with a Positive Pressure Ventilation Fan (PPV), the following ventilation procedure may be modified to allow for effective positive pressure ventilation.



The outside team's primary responsibility during normal fire operations must be to determine the need to ventilate. Positive Pressure Ventilation will only be provided after coordination through the Incident Commander. The outside team shall automatically initiate either PPV ventilation or vertical ventilation on any structure in which smoke is visible, unless ordered "Do Not Ventilate" by the Incident Commander. Vertical ventilation holes shall be a minimum of 4' X 4'. Any hole smaller is unacceptable. Thus, it is implied and advisable that the circular saw be used rather than the ax. Conventional roof openings should be used whenever possible, however ventilation openings must be sufficient to vent smoke. Gable vents ARE NOT to be removed unless ordered by the Incident Commander. Gable vents are just that - vents. Removing them does not significantly increase ventilation to the fire building but, rather, causes the fire to race toward the gable end of the roof. Also, the effort required to remove the gable vent unnecessarily jeopardizes the safety of the fire fighter who is doing it while working from a ladder. Therefore, we will not remove gable vents unless we absolutely have to. The outside team will be expected to cut large, roof ventilation holes to provide a chimney through which heat, smoke, and fire may vent. Thus providing the engine

Truck Company Operations - Interior Modes Continued

attack team with a more tenable environment in which to work and giving relief to possible victims located within the structure. Laddering the remainder of the building shall be accomplished only after ventilation is completed, except where ladders are needed for rescue.

The cutting of utilities shall only be done after ventilation is accomplished. It is permissible for 1 man to ventilate while 1 man cuts utilities. However, ventilation of the building is never to be delayed for any other action other than rescue of immediate, visible victims. The Utility cutoff man should go to roof immediately after cutting the utilities to assist the ventilation effort.

Truck Operations - Two (2) Truck Response

When 2 truck companies respond to an incident on the 1st alarm, the 2nd due truck should attempt to position itself opposite of the 1st truck position. Such position will usually be in the rear of the building.

When 2 truck companies respond to an incident, the 1st truck company is assigned to INSIDE duties. The 2nd truck company is assigned to OUTSIDE duties. In both cases, each of the truck companies shall operate as cohesive teams and shall not split their personnel unless ordered to do so. It should be obvious that during a 2 Truck response the 1st arriving truck may have to conduct some initial outside duties. However, upon being relieved by the 2nd Truck, the 1st Truck ventilation team must, go inside and assume the inside duties to which it is assigned.

Rescue Needs

Search and rescue priorities are, of course, our primary consideration in emergencies. What we need to realize, however, is that search/rescue operations cannot be carried out effectively, in most cases, without coordinated fire attack and heat/smoke control. Thus, the basic procedures outlined above will usually have to be done if successful search/rescue is to be accomplished. Abandonment of these duties in order to search/rescue can, in many instances, kill the victim. Think and act accordingly.

Truck Company Operations - Interior Modes Continued

Summary Of Truck Operations - One (1) Truck Response

OUTSIDE TEAM

- 1. Both get SCBA.
- 2. Ventilation man gets saw or PPV
- 3. Utility man gets ax, pike pole.
- 4. Both get ventilation ladder.
- 5. Raise ventilation ladder.
- 6. Vent building, cut utilities.
- 7. Both ladder building.
- 8. Both conduct salvage.

INSIDE TEAM

- 1. Both get SCBA.
- 2. Force entry to Bldg.
- 3. Both conduct search.
- 4. Both assist fire control.
- 5. Both conduct salvage.

NOTE: If you have a five-man company, the 5th man shall work with the inside team. The 5th man, when leaving the truck, shall wear an air mask and take two (2) salvage covers to the building.

PROPERTY CONSERVATION (SALVAGE) PROCEDURES

PURPOSE: To assure that the fire department responsibility of property conservation is effectively achieved.

It shall be the primary responsibility of the Truck Company members assigned to "outside" and "inside" tasks, once those tasks are completed, to conduct property conservation (salvage) within the fire building. All measures should be taken to protect property from exposure to flames, heat, smoke, and water damage. Use of salvage covers to complete this task is important. The Truck Officer will be responsible for assuring that the property conservation task is addressed and completed.

It shall be the secondary responsibility of the 2nd Engine Company to perform property conservation when search/rescue tasks are completed and if there is no need for additional fire fighting. The engine Company should utilize salvage covers from the Truck Company in performing their task. Engine Company personnel must inform the Truck Company Officer of the number and placement of salvage covers prior to leaving the scene.

Once property conservation is completed, the Incident Commander should be notified by the Truck Officer with the radio message, "SALVAGE COMPLETE." The Incident Commander does not have to notify alarm concerning the completion of the property conservation task.

RESPONSE TO FIRE ALARM SYSTEMS AND SPRINKLER ALARMS - COMPANY PROCEDURES.



PURPOSE: To guide fire companies in their response to structures with fire detection, sprinkler, and other alarm systems.

- All fire companies shall conform to the following procedures when responding to residential
 and commercial structures in which the fire detection or sprinkler alarm system has sounded
 (tripped). Obviously, if there is visible indication of fire, fire fighting operations shall be
 initiated. The Following Procedures Are Primarily Designed To Guide Operations When,
 Upon Arrival, There Is No Visible Indication Of Fire.
- 2. COMMERCIAL STRUCTURE Company Shall Make Entry Into The Building Within A Reasonable Time Frame. If the building is locked (such as after working hours), the fire company shall attempt to enter the building, without damage, to determine whether a fire exists. If, by exterior check no apparent fire exists, companies may wait to enter a locked building for a reasonable period while the Alarm Office attempts to locate a responsible party who may provide entry to the building (see #6 below). If a party cannot be located within a reasonable period, companies must enter the building to verify no existence of fire. In entering a locked building, companies should use forcible entry techniques which will best allow them to re-secure the building should they need to (see #4 below).
- 3. RESIDENTIAL STRUCTURE Company Shall Enter The Building If The Building Is Occupied And The Occupant Permits Entry. If the building is unoccupied, the company officer shall determine the need to enter the structure, only after a thorough exterior search has been conducted. The officer should attempt to make a reasonable determination as to whether a fire exists on the interior prior to making entry to an unoccupied residence. Once security of an unoccupied structure is breached, that structure must either be secured or left with a responsible party before the fire company can leave the scene. If, by conducting a thorough exterior search, the officer can reasonably determine that no fire exists on the interior, the officer may return to in-service status, without having entered the building.

Response To Fire Alarm Systems And Sprinkler Alarms - Company Procedures. Continued

UPON LEAVING, THE COMPANY OFFICER SHALL REPORT VIA RADIO:

- A. There is no apparent indication of fire.
- B. The building is secure or a responsible party is present.
- 4. IF INTERIOR INSPECTION FINDS NO FIRE, Fire Companies May Return To In-Service Status Immediately After Securing The Building. Once the fire department enters a locked building, we are legally liable to secure the building before leaving it unattended. Thus, if no responsible party is present, fire companies must be sure that the building is reasonably locked so as to prevent entry from an unwanted intruder. Therefore, fire companies should attempt to enter buildings using methods which will limit damage to the building and which will afford them a way to re-secure the property. (upper floor window, door; entry from fenced area, etc.)

Upon Leaving, The Company Officer Shall Report Via Radio:

- A. The Status of the system (in-service or out-of-service).
- B. The building is secured, or a responsible party has arrived.
- 5. WHEN INSIDE, FIRE COMPANIES MAY "NEUTRALIZE" (Turn off) THE SPRINKLER OR FIRE ALARM SYSTEM In Order To Prevent Actual Or Potential Damage From Occurring. If a building representative is present, fire companies should allow them to carry 'out the process of neutralizing the system. If done by the fire company, this will usually be limited to (1) turning off the sprinkler alarm valve, or (2) turning off a riser to the sprinkler system, or (3) silencing the audible fire detection alarm, or (4) placing the fire/sprinkler system on city disconnect. However, in any situation, the fire company should not commit unnecessary damage to a system in order to neutralize it. If a fire has occurred, a sprinkler system should not be shut down unless the fire is knocked down and an Officer is assigned to remain, with radio, at the shut-off valve.

In No Case Shall A Company Reset An Alarm System

Should the alarm system be neutralized by a fire company, the Incident Commander must notify the Alarm Office that the system is no longer in service. The Alarm Office will subsequently notify the Fire Prevention Bureau who will then follow-up to assure that the system is restored.

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Response To Fire Alarm Systems And Sprinkler Alarms - Company Procedures. Continued

- 6. After arriving on the scene the Incident Commander should request the Fire Communications Bureau to contact a responsible party who will respond to the alarm property. The responsible party will generally be either the owner/manager of the property or the alarm company representative.
- 7. If a responsible party is located, the Communications BUREAU shall notify the Company Officer at the scene. If notified that the responsible party is en-route, the Company Officer may wait, a reasonable time (from time of alarm) for their arrival. Or, the Officer may return ones company to in-service status as long as the building can be reasonably secured. REMEMBER AN UNOCCUPIED BUILDING MUST BE LEFT IN A SECURE STATUS. Should the Officer be unable to secure the building, the Officer should ask for a Police Technician to be dispatched to stay with the building until a responsible party responds.

SUMMARY

COMMERCIAL BUILDINGS

- 1. Reasonable time Enter
- 2. Check it out.
- Return to in-service status if:
 a. building is secured or
 b. responsible party is present.

RESIDENTIAL BUILDINGS

- Occupied Enter Unoccupied - Exterior check
- 2. Enter if needed.
- 3. Return to in-service if:a. building is secure, orb. responsible party present, orc. no apparent fire (bldg. secure)

RESPONDING WITH EMERGENCY UNITS - company procedures

PURPOSE: To establish fire company response procedures when responding with Emergency Units (ambulances).

When a Fire Company is dispatched along with a fire department emergency unit, such as is the case with any "first responder" incident, that Fire Company shall remain on the scene until the Emergency Unit arrives. The Fire Company shall not leave the scene, prior to ambulance arrival, or disregard (stop by radio) the Unit when there exists a patient for whom the ambulance is needed.

The Company Officer should make a written note of the number of the Emergency Unit being dispatched. Requesting the number of the responding Emergency Unit over the radio after being dispatched is not acceptable.

The Company upon arrival, and at the earliest time possible, shall have the assigned Firefighter Paramedic or EMT (if one is assigned) transmit to the responding Emergency Unit on the assigned fireground talkgroup "GRD". This means with the new radio system that after the first responder arrives on the scene, they just use their portable radio and attempt to raise the Unit on the assigned fireground talkgroup "GRD" that has been assigned to them and the Unit's portable radios. If the first responder wishes to disregard the Unit they must switch the channel selector knob to #16 "REGRP" and then to #1 "FIRE1" and advise dispatch to disregard the unit. The following information should be given by the first responder concerning the description and condition of the patient:

- 1. The patient's AGE and SEX.
- 2. The patient's CHIEF COMPLAINT.
- 3. A brief HISTORY OF THE PRESENT ILLNESS.
- 4. The patient's STATE OF CONSCIOUSNESS or DEGREE OF DISTRESS.
- 5. VITAL SIGNS, if obtainable (Pulse & Respiration's).
- 6. PERTINENT PHYSICAL FINDINGS.

For Example, a transmission regarding a patient might occur as follows:

"We have a 53-year old male, complaining of severe shortness of breath, which woke him up. It is worse when he lies down. He has a history of high blood pressure and takes Diuril at home. He is alert, but is having trouble breathing. His pulse is 130 and regular, and his respiration is 36 per minute, with loud wheezing."

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Responding With Emergency Units - company procedures Continued

This description alerted the paramedics that the patient was most likely suffering from congestive heart failure.

It is NOT NECESSARY for the Company Officer to transmit to Fire Alarm that the emergency Unit has arrived on the scene. The Emergency Unit reports itself on the scene.

On emergency calls that require both Firefighting and EMS personnel, the highest ranking Firefighting officer will assume the position of Incident Commander of the scene, however, the EMS officer (Paramedic II) will have complete medical authority concerning patient care until relieved by a higher-ranking EMS Supervisor. All personnel must follow the Departmental Command and Communication procedures concerning scene management.

The Company Officer shall keep their company on the scene to assist the Emergency Unit personnel until such assistance is no longer needed.

Fire fighting units, upon arrival at the fire scene shall initiate immediate and appropriate action for safe removal of all occupants and the successful and rapid extinguishment of the fire. It shall be the responsibility of all members to direct their efforts toward the saving of life, minimizing damage to properties and enable the structure to be reoccupied.

PUMPER EXTRICATION PROCEDURES - THREAT OF FIRE

PURPOSE: To provide maximum safety to victims and fire personnel during vehicle extrication incidents.

Many extrication incidents require that the engine company provide fire control protection to the victims due to the presence of motor fuels. Should such fuels ignite, the victim could be dead in seconds unless the fire is controlled and/or extinguished. Thus:

Whenever A Victim(s) Is To Be Extricated From A Vehicle Accident In Which There Is Any Fuel Spillage Or Danger Of Fire:

The engine company shall lay a minimum of a 13" hose line with Light Water attached in order to quickly suppress a fire should it occur. The use of a 1" booster line, in these instances, is forbidden. The 1" booster line is capable of only 20-40 GPM which is not enough to protect victims should fire occur.

Should the spill be extensive, the Incident Commander should "blanket" the fuel with Light Water and call for one or more additional Engines if more than 4 containers are likely to be used. In such case, the Incident Commander should also call for Light Water 2 Truck in order to replenish the Light Water supplies of the Engines.

NOTE: If there is any hesitancy regarding this procedure, just ask yourself. If I were the victim, which size hose would I like to have protecting me. A hose which is capable of only 40 GPM, or a hose which is capable of 250 GPM with foam?

RECOVERY / RESCUE - trench and building collapse

PURPOSE: To assure a safe, effective work environment for personnel during incidents involving trench or building collapse.

No Fire Personnel Shall Enter A Trench Deeper Than Four (4) Feet (Waist-Depth) Or A Building Which Has Collapsed Totally Or Partially Without Proper Shoring Being In Place.

FACTS: 1 Cubic Foot of Soil Weighs 100+ lb.

1 Cubic Yard of Soil Weighs 3,000 lb.

1 Victim Covered with 1 Foot of Soil = 300-600 lb. of Force. In a trench, if a victim is not visible, he is likely DEAD.

Fire personnel must realize that when they respond to a trench or building collapse incident, the victim(s) has been trapped for a number of minutes. In most cases, if the victim is not visible, he is probably dead. If the victim is still alive, it means that he can breathe. Thus, there is no need to hurry the rescue effort. Personnel must take time to properly shore the trench or building prior to entry in order to protect the victim and themselves. Initiating a trench or building collapse recovery without proper preparation jeopardizes the safety of the victim and the fire fighter.

PROCEDURES

- 1. Park apparatus at least 50' from the incident.
- 2. Clear spectators from area, and secure the area 50' minimum.
- 3. Secure area from vibration factors (traffic, etc.)
- 4. Notify Fire Alarm of material needs Fire Alarm will contact the nearest building supplier or Public Service to procure materials.
- 5. Procure shoring materials:

<u>Trench Shoring</u> <u>Building Collapse</u>

1" - 1.25" Sheeting/platform Cranes, Bulldozers

2" x 12" Uprights Hydraulic Spreading Equip.

4" x 4" Shoring (Cross-brace)

- 6. Locate victim area shore 12' around victim.
- 7. Shore up BEFORE you enter.

CONFINED ENTRY SPACE PROCEDURES

PURPOSE: To assure the safety of personnel entering into any confined space for rescue, medical, or fire suppression purposes.

A confined entry space is identified as any location that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and is not designed for continuous employee occupancy.

The Division of Fire Services shall insure that each member of the rescue service is provided with, and is trained to use properly, the personal protective equipment and rescue equipment necessary for making rescues from confined entry locations.

No attempt at entry into a confined space will be initiated prior to the arrival and entry approval by one of the following:

- 1. Haz-Mat Squad personnel: To assure air quality through monitoring and to provide chemical protective clothing, if necessary.
- 2. SORT Team: To provide specialized rope rescue and specialized lowering or hauling systems.
- 3. Haz-Mat Battalion Chief: Dispatched with Haz-Mat for specialized monitoring of any chemical or hazardous environment and to also act as Incident Commander.
- 4. Division Chief: To act as Incident Commander unless this authority is transferred to the Haz-Mat Battalion Chief. The Incident Commander will determine any hazards the rescue attempts may encounter prior to allowing entry into the location.

Each member of the rescue service shall be trained to perform the assigned rescue duties. Each member of the rescue services shall also receive the training required of authorized entrants.

Each member of the rescue service shall practice making confined space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, mannequins, or actual persons from simulated accident sites.

Each member of the rescue service shall be trained in basic first aid and in cardiopulmonary resuscitation (CPR). At least one member of the rescue service holding current in first aid and in CPR shall be available.

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Confined Entry Space Procedures
Continued

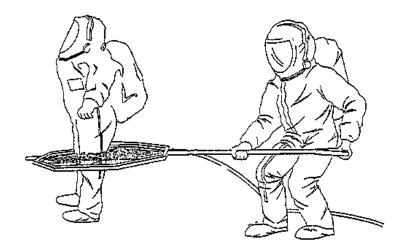
To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment would increase the overall risk of injury or would not contribute to the rescue of the victim. Retrieval systems shall meet the following requirements:

1. Each authorized entrant shall use a chest or full body harness, with retrieval line attached at the center of the entrant's back near shoulder level, or above the rescuer's head. Wristlets may be used in lieu of the chest or full body harness if the Incident Commander and rescuer determines that the use of a chest or full body harness is unfeasible or creates a greater hazard; and that the use of wristlets is the safest and most effective alternative.

The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

If a victim or rescuer is exposed to a substance for which a Material Safety Data Sheet (MSDS) or written information is required, this information shall be made available to the medical facility treating the exposed victim or rescuer.

DECONTAMINATION PROCEDURES



PURPOSE: To establish procedures for determining the need and level of decontamination of victims, personnel, and equipment.

Victims, fire personnel, and fire equipment can become contaminated with various types hazardous materials. People and equipment must be considered contaminated whenever they come in contact with a hazardous material. Such contact can be direct (actually touching) or indirect (through water run-off or air). The Incident Commander must be concerned with the likelihood of contamination during any haz mat incident.

The Incident Commander must also be aware that many routine emergency incidents (fires, vehicles, etc.) may involve hazardous materials. When the suspicion or presence of hazardous materials arises at such incidents, the Incident Commander must take appropriate actions regarding haz mat handling and decontamination. Decontamination must never be neglected as an important emergency incident consideration.

At all incidents involving hazardous materials, the Incident Commander shall make a determination regarding the level of required decontamination (decon.). Such determination shall be made through consultation with the on-scene haz mat advisor (Battalion 5 or Fire Squad Officer), the EPA (Environmental Protection Agency) representative, and other related professional advisors who may assist in the decision. When the level of decon. is determined, the Operations Officer shall designate one (1) individual (radio call "decon") to assume responsibility for the decon process. No victims, personnel, or equipment shall exit the operations area without proper decontamination and the approval of the Decon Officer. The Decon Officer shall answer to the Operations Officer under the ICS.

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Decontamination Procedures Continued

DECONTAMINATION LEVELS

LEVEL I - This level of contamination requires the washing (showering) of personnel, victims, and equipment. Water run-off does not need to be contained. Clothing and equipment may require removal, isolation, and washing to restore to normal use,

LEVEL II - This level of contamination requires a FULL decontamination process utilizing decontamination showering equipment. WATER RUN-OFF MUST BE CONTAINED AND DISPOSED OF PROPERLY. Clothing and equipment must be isolated and a determination made regarding disposal. Level II decontamination equipment shall be brought to the scene at the request of the Incident Commander.

REQUESTING HOSPITAL WING UNITS



PURPOSE: Guidelines to be used for requesting the Hospital Wing Unit.

Hospital Wing Units are routinely available to respond to any incident when requested. Incident Commanders, Emergency Unit personnel and Company Officers may request the Hospital Wing to respond. Personnel requesting the Wing should take into consideration the Landing Zone requirements etc. found under 'Helicopter - Landing And Ground Procedures' in the Fire Suppression Standard Operating Procedures.

The hanger for the Hospital Wing is located at 1080 Eastmoreland / I240-midtown. If the Wing is requested they can turn-out, be airborne and on the scene within approximately five (5) minutes. The Hospital Wing Unit is a twenty-four (24) hour a day operation. Sometimes both Wing Units may be out of town on calls and neither available.

Once a Wing Unit is requested the Wing Unit can be disregarded by notifying Fire Communications. Personnel should also review *'Dispatching And Operating Guidelines - Hospital Wing Units'* in the Fire Communications Standard Operating Procedures. The Fire Communications SOP deals with utilizing fire radio frequencies etc.

Guidelines For Requesting The Wing Unit:

- 1. Can the Wing Unit land per Landing Zone requirements?
- 2. Lengthy running time for the first arriving Emergency Unit.
- 3. Number of trauma patients involved, degree of injury of patients, versus response time and/or availability of Emergency Units.
- 4. When the Wing is requested, additional resources may be needed to provide adequate manpower to secure a landing zone. (This may consist of additional fire companies, Command Officers, and/or police).
- 5. The Wing is unable to transport adult patients under certain conditions:
 - a. Adults who have a traction splint applied.
 - b. Patients over 6'3".
 - c. Patients whose weight exceeds 350 lb.
 - d. Padded board splints that exceed the boundary of the long spine board.
- 6. If a trauma patient needs to be transported by the Wing and a fractured femur must be treated, then the mast trousers should be applied as a air splint. All rules for air splints will then apply to the mast trousers.
- 7. Pediatric patients who have padded board and traction splints applied can be transported provided the splints do not exceed the boundary of the long board.

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HELICOPTER - LANDING AND GROUND PROCEDURES

PURPOSE: To guide personnel in utilizing helicopters during emergency operations.

When helicopters are dispatched to assist in emergency operations, the Incident Commander shall designate an Air Operations Officer who shall coordinate and be responsible for the landing and ground activities associated with the helicopters. The Air Operations Officer (Radio call: "AIR OP") shall answer to the Operations Officer.



A. LANDING ZONE

1. Select landing zone area.

100' x 100' Day 200' x 200' Night

- 2. Notify Operations Officer of landing zone location.
- 3. Clear landing zone of obstacles and loose debris.
- 4. Assure that NO power lines or aerial obstacles inhibit approach.
- 5. Mark landing area with "secured" barrier tape.

B. GROUND CREW

- 1. One person Assist in landing directions.
- 2. Establish crowd control.
- 3. Assure that NO LIGHTS are directed toward helicopter at night.

C. GROUND OPERATIONS - SAFETY

- 1. One person assist helicopter crew.
- 2. One person guard tail rotor area from safe distance.
- 3. Approach helicopter ONLY when signaled by pilot.
 - a. approach at 45 degree angle to the nose.
 - b. approach from low side of slope.
- 4. During Take-off
 - a. clear area of loose debris.
 - b. clear area of people, departing path.

Helicopter - Landing And Ground Procedures Continued

D. SAFETY TIPS

- 1. When approaching/leaving Crouch Low, Go Down Slope.
- 2. Stay within pilot's field of vision.
- 3. Carry tools NO HIGHER than waist.
- 4. Hold onto your hat/helmet.
- 5. When inside get buckled-up and stay buckled-up until cleared by pilot.
- 6. Avoid: MAIN ROTOR, TAIL ROTOR, PITOT TUBES.

SALVAGE COVERS - COST AND RENTAL PROCEDURES

Salvage covers will not be left on a scene without the proper accountability from authorized agents of the property where covers are used. On duty officers will be responsible to ensure these procedures are observed. Assigned salvage covers shall be accounted for at all times.

The cost associated with salvage covers, tar paper and pumping water from basements are as follows:

Non-fire use of salvage covers (tarpaulins) Initial charge:	\$20.00
(a). Non-fire <u>per day</u> charge for <u>each</u> cover for <u>each</u> day thereafter:	\$ 5.00
(b). Non-fire service call, use of tar paper, patching roofs, windows, etc.	\$20.00
Service fee for all salvage covers (fire related) first ten (10) days:	\$20.00
(a). <u>Per day</u> charge for <u>each</u> cover starting with the 11th day:	\$ 5.00
Service fee for pumping water	
(a.) Not fire related:	\$10.00
Plus charge per 1,000 gallons:	\$ 5.00
(b.) Fire-related pumping water:	No Charge

Cost for replacement of a salvage cover:

A sample statement form is on the following page. This form is available from Logistical Services.

\$100.00

^{*} For The Purpose Of Fixing Charges, A Day Shall Begin At 0001 Hours.

	ADDRESS	SERVICES RENDERED	DA	AY MO.	YEAR	TIME CALL RECEIVE	ED FIRE	NON-FIF	
								X2.	
	NAME OF	RESPONSIBLE PARTY		PHONE NO	MBER	ADDRESS IF DIFFE	ERENT FROM	ABOVE	
		SIGNATURE OF RESPONSIBLE	PARTY			DATE & TIME COVERISI RETURNED			
		SIGNATURE OF RESPONSIBLE	PARIS			DATE & TIME COVE	JACO PETONIC		
		COMPANY MAKING CALL	SHI	IFT	OFFIC	ER IN CHARGE	F	IANK	
CHARGES	TARPAULIN RENTAL	NON-FIRE USE: A service of A PER-DAY CHARGE OF \$5 tinuing until covers are return FIRE USE: Fire cause service regardless of the number of cobegin on the 11th day.	i.00 per co ed. For th e fee for all	ver will be ne purpose I tarpaulins	made, sto of fixing used sha	arting on the first da charges, the day sha all be \$20.00 for the	ay of rental a all start at 12 first TEN D	end con- e:01 AM.	
NO NC	N.G.	NON-FIRE PUMPING: A service charge of \$10.00 per job, PLUS \$5.00 for each 1,000 gallons of							
Ħ	PUMPING	FIRE CONNECTED PUMPING: No charge.							
LANA	PU W	FIRE CONNECTED PUMPIN	IG: No chi	arge.					
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	PUMPING TARPS OTHER WATER RENTAL SERVICE	OTHER NON-FIRE SERVICE made for these services. OTHER FIRE SERVICES: (I FIRE	E: (Patchi Patching ro OF INS ONS ER SERVICE	NUMBER OF DAY	R S ERVICE HARGE:	No charges for fire SERVICE CHARGE: TOT DUE	TOTAL DUE: _	ce calls.	
	OTHER PUMPING TARPS OTHER	OTHER NON-FIRE SERVICE made for these services. OTHER FIRE SERVICES: (I FIRE	Patching ro	NUMBER OF DAYS	ERVICE HARGE:	No charges for fire SERVICE CHARGE: TOT DUE TOTAL RECEIPT DATE:	TOTAL DUE:	ce calls.	

APPARATUS AND VEHICLE PARKING

PURPOSE: To allow incident commanders, staging and base managers to account for

personnel and apparatus more efficiently at the scene of an incident.

SCOPE: Fire Department vehicles responding to the scene of an emergency where

level two staging or base has been established.

RESPONSIBILITY: It will be the responsibility of the incident commander to

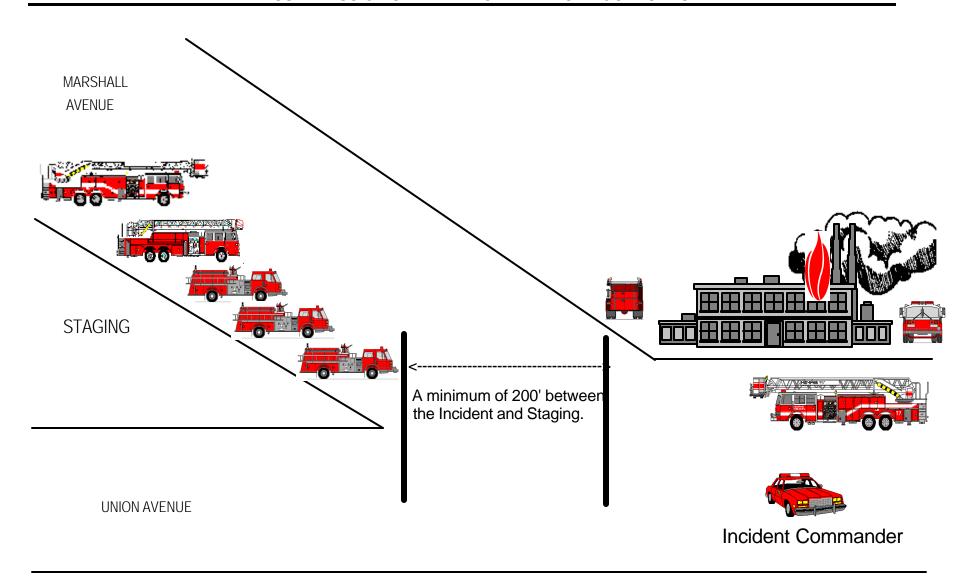
establish an area that will accommodate a large amount of fire department apparatus. **The first arriving company officer will be**

responsible for maintaining staging / base.

POLICY:

Fire Department vehicles will approach level 2 staging or base from a direction opposite the incident area so as not to interfere with operations. The first arriving company officer at staging will establish the parking order as depicted in the graphic on the next page and advise Fire Communications to relay to responding companies the proper route for easy access to the area. Battalion Chiefs, Division Chiefs and staff personnel must park cars off the street so as not to impede traffic between staging/base and the incident area. Company personnel must remain together at their assigned apparatus ready for deployment. Police must be summoned to block streets and provide security for the staging / base area.

NOTE: On some incidents this parking arrangement may not be practical due to the width of streets or civilian vehicles being in the way. However, parking will be arranged in an orderly manner so that accountability of apparatus can be easily accomplished.



January 5, 2000 2-59

USE OF ELEVATORS IN THE FIRE SERVICE

ELEVATOR POLICY

During fire situations elevators present an extreme danger to fire service personnel due to the erratic behavior caused by fire, smoke and water during firefighting operations. It is important that all personnel know how elevators work and have an understanding of what malfunctions may occur.

The following shall serve as guidance for all fire service personnel operating in buildings with elevator service.

Note: Fire Service functions must always be utilized provided the elevator is so equipped.

- 1. Personnel deploying in elevator cars shall wear full protective equipment, carry forcible entry tools, means of communications and a fire extinguisher (pumpcan).
- 2. In buildings where a working fire is known, or has been declared, elevators will not be used unless housed in an area separate from the involved section of the building. Separate elevator banks may be utilized if they do not service the fire floor.
- 3. All elevator cars must be recalled and put under fire service control by initial arriving companies. Fire Service control must be maintained throughout the incident.

Note: The decision to use elevators should be based on assurances that the designated elevator landing area is safe. All personnel must exit at least two floors below the fire floor area during fire investigations. Again, once fire conditions are known, elevators shall not be utilized unless the conditions outlined in #1 and #2 above are met.

Safety: At no time shall any company take an elevator closer than two floors below the reported fire area for investigative purposes.

HANDLING AND DISPOSING OF POTENTIALLY INFECTIOUS MATERIALS

Fire Suppression employees, when dispatched on a first-responder call, will make every effort to pickup the discarded supplies before leaving the scene. They will take the discarded supplies to the engine house and call the nearest Battalion Chief or Emergency Unit Supervisor to come by and pick up the material for disposal. All discarded items are to be placed in the bio-hazard bags that are available at each station.

Extreme caution should be used when handling sharp items such as needles. All needles are to be put in sharps containers before being discarded.

The only items that need to be placed in the bio-hazard bags are those items that come in direct contact with body fluids or known contagious / infectious patients.

32-gallon hazardous material tubs are at Engine Houses 7, 23, 29 and 41 for the purpose of disposing of contaminated materials. The company officers at these engine houses are responsible for contacting the proper firm that is contracted with when the container is completely full.

The date and time of pickups should be logged in the company log book and the desk log book.

DISPLACED DRIVER POLICY

Displaced Drivers will be allowed to exercise their choice of assignment to another apparatus of the same type from which they were displaced.

Example:

A senior aerial is moved to a house that was formerly occupied by a junior aerial. The tillerman on the apparatus is being transferred with the senior aerial and that tillerman does not want to go to the new engine house. The tillerman will be allowed to request an assignment to any senior aerial truck company that has a tillerman/driver vacancy. The tillerman will not be allowed to transfer to an engine vacancy. Only displaced engine drivers will be allowed to request a transfer to a vacant engine driver position.

FIRST RESPONDER PROGRAM

PURPOSE: To define the roles and responsibilities of the First Responder Emergency Medical Technician as approved by the Division of Fire Services Medical Director.

DEFINITIONS:

"First Responder" means the departments first resource responding to or on the scene of a medical emergency and or injury.

"Emergency medical technician" means an individual licensed to practice prehospital emergency medical care.

"Emergency medical technician - Paramedic" means an individual licensed to practice advanced prehospital emergency medical care.

"Emergency Medical Services" means the service utilized in responding to the perceived need for immediate medical care in order to prevent loss of life or aggravation of illness or injury.

"Ambulance" means vehicle that is especially designed, constructed or modified and equipped and in intended to be used for and is maintained or operated for transportation upon the streets and highways of this city for persons who are sick, injured, wounded, otherwise incapacitated, or in need or medical care.

"Medical director" means the supervision by a physician licensed to practice in the state of Tennessee of all medical aspects of patient care within pre-hospital emergency medical services.

"Patient" means an individual who, as a result of physical or mental condition needs medical attention.

First Responder Program Continued

Role And Responsibilities Of The First Responder Emergency Medical Technician:

a) Competency of the Emergency Medical Technician / First Responder.

The primary responsibility of the EMT / First responder is to carry out expert pre-hospital emergency care to the victims of emergencies and assist unit personnel in continued treatment upon their arrival. The EMT / First Responder must accomplish these duties in a great variety of circumstances and often under considerable physical and emotional stress. A competent EMT / First Responder is a person capable of exercising technical skills with confidence and in good judgment under difficult and stressful situations. As with all professionals in the medical community, it must be realized that continuing education is an integral part of the EMT / First Responders ability to maintain a high degree of competency. It must also be stressed that evaluation of the functioning EMT / First Responder is essential to the maintenance of quality medical care.

The departments EMT / First Responder assesses the seriousness of the patients condition, uses appropriate emergency care techniques and equipment to stabilize the condition. The First Responder will also help in the transport of patients to the hospital when the condition of the patient deems it necessary. The First responder must deal with the patient's relatives and bystanders along with securing the safety of the emergency scene. The first Responder must maintain good communications with dispatch and other emergency personnel. It is essential that all first responder calls are documented by correctly completing the Division of Fire Services First Responder Incident Report Form. Good documentation along with quality improvement measures will reduce the liability of the EMT / First Responder and the City of Memphis.

b) Standard Operating Procedures For The EMT / First Responder.

The EMT / First Responder must be able to perform the following skills and understand all elements of total emergency care by the standards set forth by the State of Tenneessee, the Division of Fire Services, and it's Medical Control Director. The skills and requirements that follow will enable the EMT / First Responder to carry out all basic EMT prehospital emergency care, and are within the guidlines of the Federal Department of Transportation and the State of Tenneessee Department of Health.

1. The EMT / First Responder will be able to correctly perform an oral and a physical exam. Oral Exam: History taking which will include chief complaint, pertinent history of the present illness and past medical history including any medications currently taken by patient. Physical Exam: Assessment of the patients appearance and level of consciousness.

Evaluation of all vital signs. The EMT / First Responder must treat any life threatening problems that may arise as assessment is performed.

First Responder Program Continued

The EMT / First Responder must be able to perform a focused trauma and medically oriented head-to-toe survey including but not limited to:

- a) Inspection and palpation of the head and neck
- b) Inspection, palpation and auscultation of the chest. Auscultation should include detection of normal and abnormal lung sounds.
- c) Inspection and palpation of the pelvis and abdomen.
- d) Inspection and palpation of extremities.
- e) Evaluation of neurological status.
- f) Assess baseline vital signs
- g) If patient is unable to communicate obtain history from bystander, or family
- h) Initiate prompt care and stabilize patients condition as problems are found during patient assessment. *** REFER TO THE STATE OF TENNEESSEE DIVISION OF EMS EMT SKILLS MANUAL FOR FURTHER GUIDENCE ON ALL AREAS OF PATIENT CARE.
- 2. The EMT / First Responder must have proficiency in Cardiopulmonary Resuscitation: Adult, child and infant.
- 3. The EMT / First Responder must have the knowledge of adjunctive equipment during airway management **including but not limited to**:
 - a) Proper technique of bag-valve-mask (adult, child, and infant).
 - b) Proper selection and insertion of an oropharyngeal and nasophayngeal airway.
 - c) proper use of the PTL airway and Combitube
 - d) The EMT must select the proper oxygen delivery device and oxygen flow rate as indicated by the patients condition.
- 4. The EMT / First Responder must have knowledge of the application of stabilization devices **including but not limited to**:
 - a) traction splints
 - b) sling and swathes
 - c) long spine boards
 - d) the XP1
 - e) cervical collars
 - f) head immobilization devices.
 - g) extremity splints.

5.	The EMT / First Responder must be proficient in correct techniques regarding MAST.						

First Responder Program Continued

- 6. The EMT / First Responder must provide proper hemorrhage control and bandaging techniques.
- 7. The EMT / First Responder must be able to apply patient assessment skills to detect and to provide efficient prehospital care in many situations. The following are frequent but not inclusive examples:
 - a) head and spinal injuries
 - b) fractures
 - c) internal and external hemorrhage
 - d) angina pectoris, acute myocardial infarction, congestive heart failure, stroke and chronic obstructive pulmonary disease.
 - e) hyperventilation
 - f) distinguish between diabetic coma and insulin shock
 - g) seizures
 - h) poisoning
 - i) obstetrical care/childbirth
 - j) all types of burns
- 8. The EMT / First Responder will be proficient in the use of basic tools used to remove patients entrapped in automobile accidents.
- 9. The EMT / First Responder will be expected to know the proper use of communication equipment and to use correct medical terminology in reports given to other medical professionals.
- 10. The EMT / First Responder will be proficient in:
 - a) medical/legal responsibilities
 - b) record keeping and documentation
 - c) package patients for transfer and transport
 - d) correct lifting techniques
 - e) management of mass casualties and triage using basic assessment skills
- 11. The EMT / First Responder must have knowledge in safe driving skills and correct use of warning devices found on the ambulance.
- 12. The EMT / First responder will understand how to operate stretchers used by the Division of Fire Services.

First Responder Program Continued

- 13. The EMT / First Responder should be well versed in anatomy, history taking, assessment and prehospital emergency treatment. The following topics and conditions are examples the EMT should have knowledge in.
 - a) chest and abdominal trauma
 - b) soft tissue injuries including: burns, avulsion, impaled objects, evisceration's, amputations, and bleeding control.
 - c) the central nervous system in regard to CVA/TIA.
 - d) the central nervous system in regard to closed and open head
 - e) injuries, all spinal injuries, and altered mental status.
 - f) medical emergencies including anaphylactoid reactions, acute abdomen, endocrine disorders, and environmental emergencies.
 - g) the cardiovascular system including recognition of signs and symptoms of acute cardiac compromise.
 - h) the respiratory system.
 - i) the musculoskeletal system including treatment of sprains, strains, fractures, and dislocations
 - j) behavioral emergencies: negotiations, crisis intervention in patients who are suicidal, assaultive, destructive, anxious paranoid, intoxicated, raped, resistant, bizarre, or have any other mental impairment.
 - k) obstetrical and gynecological emergencies: premature birth, breech birth, abortion, arm or leg presentation, multiple birth, prolonged delivery, prolapsed cord, ruptured uterus, pre and postpartum bleeding, an apneic infant, preeclampsia and eclampsia, rape, and supine hypotensive syndrome.
 - pediatric emergencies: child abuse, SIDS, asthma, bronchiolitis, croup, epiglottis, seizures, and other medical conditions.

MANPOWER:

- 1. At the beginning of each shift the officer in charge will designate the EMT or other personnel that will be responsible for assisting the emergency unit in transporting the patient to the Hospital.
- 2. It is crucial and mandatory that all personnel on the First responding company. assist the EMT and the Unit personnel on the scene of an emergency call. It is the responsibility of the officer in charge of the First responding company to see that all of their 'manpower' is utilized as the situation demands.

First Responder Program Continued

Example: Cardiac arrest, all members of the First Responding company will work as a team. CPR will be alternated between personnel on the company. Upon the arrival of the emergency unit all members of the First Responding Team will continue with patient care and assist unit personnel in further treatment of patient. All personnel will remain involved in the care of the patient to insure that the call proceeds in an uncomplicated manner. At no time will personnel be idle when assistance is necessary and/or obvious. ALL MEMBERS OF THE DIVISION OF FIRE SERVICES WILL WORK AS A TEAM IN PROTECTION OF **LIFE** AND PROPERTY.

The first person to reach a patient in need shall initiate the care for that patient.

Example: The first responder and the emergency unit arrives at the same time on a person in respiratory arrest. The first person to reach the patient (EMT or CPR certified) should open the patients airway and begin assisting the patient's respiration's with a device such as an Ambu bag.

- Upon the arrival of the ALS emergency unit, the patient care responsibilities shall be
 assumed by the individual with the highest medical training. If the First Responder Company
 is staffed with a Paramedic/Fire Fighter he or she will be in command of patient care until
 relieved by someone of equal or higher training.
- 2. The number of personnel that will be utilized during emergency transport will be determined by the individual with the highest medical training staffed on the emergency unit. The determining factor will be the patients condition. At no time will transport of a critical patient be delayed due to staffing concerns.

DISREGARDING AN EMERGENCY UNIT AND PATIENT REFUSAL

- To reduce injury to our personnel and liability for the city of Memphis the First Responder company should advise the responding emergency unit to continue in the non-emergency mode. The factor that will be used to govern the change in response will be the patients overall condition.
- 2. If the First Responder company arrives on the scene and the patient does not wish medical treatment or transport the First Responding company may disregard the responding unit. Disregarding the unit can only be executed after EMT fully assesses the patient. The patient must be advised of detrimental and adverse consequences that could arise from non-treatment of condition.

First Responder Program Continued

- 3. On calls for assistance the EMT will assess the patient and make the determination if further care and/or transport by an emergency Unit is required. Vital signs and all other parameters of patient assessment must be covered.
- 4. The First responding company **must** have the patient sign a refusal form prior to departing the scene. The patient must be an adult and mentally competent for a refusal to be granted.
- 5. In the case of an minor injury or illness where the patient states that they only want to be "checked out" the EMT can evaluate the situation and determine if transport in a emergency vehicle is need. Document the situation and the patients request.

EMERGENCY UNIT REQUESTING A EMT/FIRST RESPONDER COMPANY:

The request for a EMT/First Responder Co. by an emergency unit will be made by the individual with the highest medical training on the emergency unit. The need for an EMT/First Responder Co. will be determined by the patients condition and/or situation that assistance for "manpower" will be needed.

UNIVERSAL PRECAUTIONS:

Universal precautions will be used on all patients. The following guidelines will be used:

- 1. Latex exam gloves will be used on all patient contact. Apply new pair of gloves for each patient contact to prevent cross-contamination.
- 2. Eye protection will be worn when potential for body fluid "splashing" is present.
- 3. Full body protection (Tyvex suit) will be worn when large quantities of blood and/or body fluids are present.
- 4. All infectious materials on the scene will be place in red bag found in each ambulance. All sharps will be placed in a sharps container that will be disposed of at a later time.
- 5. Proper clean up of blood/body fluids will be done with 1:10 solution of bleach and water or equivalent solution. All blood/body fluid spills will be decontaminated prior to leaving the scene. Proper handwashing and other personal hygiene measures should also be carried out.

First Responder Program Continued

DISPOSAL OF INFECTIOUS MATERIALS

To comply with federal laws on the handling and disposing of infectious materials the following procedures will be followed:

The Division of Fire Services emergency units will make every attempt to police the area of the emergency scene and dispose of any infectious materials. The infectious materials, except for needles, will be placed in a Bio-hazard bag. When full, the Bio-hazard bags will be disposed of at the following pick up points: Fire Station # 7, # 23, # 29, and # 41. The proper Medical Waste company shall be called by the company officer stationed at the pick up points when the containers are full.

Note: Needles shall be placed in a sharps container for disposal. The date and time of pickups by the Medical Waste company should be logged in the company desk log book.

THE ONLY ITEMS THAT NEED TO BE PLACED IN THE BIO-HAZARD BAGS ARE THOSE ITEMS THAT COME IN DIRECT CONTACT WITH BODY FLUIDS OR KNOWN CONTAGIOUS / INFECTIOUS PATIENTS.

First responder companies will also assist in locating infectious materials at the scene of an emergency. If any infectious materials are found after the departure of the emergency unit they will be place in a Bio-hazard bag a taken back to the engine house. The nearest Battalion Chief will be called to pick up the Bio-hazard bag for disposal.

CONTINUOUS QUALITY IMPROVEMENT

The EMS Bureau will be responsible for reviewing the First Responders incident reports and other Quality Improvement measures pertinent to the First Responder, providing opportunity for education in cooperation with EMS training for maintaining EMT certification as required by the State of Tennessee.

First Responder Program Continued

EQUIPMENT AND SUPPLY

A supply order form will be filled out every three months by the EMT and company officer. A locker should be used for storage of medical supplies. If at any time the medical supplies become insufficient between supply orders a request to the Battalion Chief should be made to fill a emergency supply order. IT IS MANDATORY that the "jump bag" is checked at the beginning of each shift for the required amount of supplies as stated on the supply list.

EMT/FIRST RESPONDER STANDARD TREATMENT GUIDELINES: The

objective of providing appropriate treatment to patients is a primary consideration. Patient assessment and treatment procedures are intended to provide standard levels of patient care. All resources and skills shall be utilized in an appropriate manner consistent with the needs of the patient. Personnel should be aggressive in the care and treatment of all patients. The following are examples you may encounter frequently. The treatment modalities are condoned by the Division of Fire Serves Medical Director, and are within the guidelins of the Federal Department of Transportation and the State of Tenneessee Department of Health.

First Responder Program Continued

Assessment of Chest Pain

- 1. Ask patient what he or she was doing at onset of chest pain (rest or activity).
- 2. Determine location of chest pain and any radiation of that pain.
- 3. Have patient describe the chest pain (dull, tightness, sharp, crushing).
- 4. Determine if anything relieves the chest pain (position, medication etc.).
- 5. Application of oxygen at correct flow rate
- 6. Assist patient with NTG if indicated
- 7. Assist other medical personnel
- 8. Document run

Cardiac Arrest

- 1. Confirm cardiac arrest (ABC s).
- 2. Initiate CPR, connect high flow oxygen to resuscitation equipment.
- 3. Insert oropharyngeal airway (may use PTL or Combitube)
- 4. Secondary Survey- look for any injuries or underlying causes of the event.
- 5. Brief radio report to responding emergency unit on patient s condition.
- 6. Assist other medical personnel
- 7. Document run

Respiratory Arrest

- 1. ABC.
- 2. Initiate rescue breathing with high flow oxygen attached to resuscitation equipment.
- 3. Insert oroparyngeal airway. Insert nasopharyngeal airway if gag reflex is present. (may use PTL or Combitube if not contraindicated)
- General Assessment.
- 5. Brief radio report to responding emergency unit.
- 6. Repeat vital signs every 5 min.
- 7. Assist other medical personnel.
- 8. Document run.

First Responder Program Continued

Cardiac (AMI, angina, CHF)

- 1. Primary Survey.
- 2. High flow oxygen via NRB at 15 LPM.
- 3. Secondary Survey.
- 4. Assist patient in admistration of NTG if indicated.
- 5. Let patient assume position of comfort.
- 6. Determine duration, location, radiation, of chest pain and any associated symptoms (wet lung sounds, dependent edema, shortness of breath).
- 7. Radio report to responding emergency unit.
- 8. Assist other medical personnel.
- 9. Document run.

Shock

- 1. Primary Survey.
- 2. High flow oxygen 15 LPM via NRB.
- 3. If trauma related maintain c-spine precautions and place patient in supine position.
- 4. Secondary survey with complete patient history.
- 5. Treat patient as necessary.
- 6. Radio report to responding emergency unit.
- 7. If no indication of spinal injury, place patient in trendelenburg position.
- 8. Repeat vital signs every 5 min.
- 9. Assist emergency unit as needed.
- 10. If patient is in shock due to a cardiac event (Cariogenic shock) refer to Cardiac procedures.
- 11. If shock is caused by an anaphylatic reaction an epinephrine auto-injector device may be administered to patient.(auto-injector must be patient supplied)
- 12. Assist other medical personnel.
- 13. Document run.

Unconscious Patients

- 1. Primary Survey.
- 2. Oropharyngeal airway if no gag reflex (Nasopharyngeal if oral airway not tolerated).
- 3. High flow oxygen 15 LPM via NRB.
- 4. Secondary Survey and patient history.
- 5. Treatment of injuries if indicated.
- 6. Repeat vital signs every 5 min.
- 7. Assist other medical personnel

First Responder Program Continued

Diabetic Patients

- 1. Primary survey.
- 2. If in respiratory distress or patient has a decreased level of consciousness administer oxygen at proper flow rate according to patients level of disrtess.
- 3. Secondary survey and patient history.
- 4. If patient is conscious, administer a liquid with a high sugar content.
- 5. Assist other medical personnel.
- 6. Document run.

Overdose, Accidental poisonings, and Haz-Mat incidents.

- 1. Primary survey.
- 2. Protect yourself form contamination.
- 3. If indicated, remove patient form the contaminated area.
- 4. Remove contaminated clothing.
- 5. Remove or wash any contaminant form patients body.
- 6. Secondary survey / General assessment.
- 7. Administer oxygen if indicated by patients level of consciousness or respiratory status.
- 8. Obtain Medications or materials ingested and the amounts taken.
- 9. Assist other medical personnel.
- 10. Document run.

Burns

- 1. Primary survey.
- 2. Remove clothing that has not adhered to patients skin.
- 3. Inspect airway for evidence of respiratory involvement. Oxygen via NRB at 15 LPM
- 4. Secondary survey.
- 5. Cover burned areas with "Burn sheets" and cool with water.
- 6. Determine type of burn and mechanism of burn (chemical, steam, flame).
- 7. Assist other medical personnel.
- 8. Documentation of run.

First Responder Program Continued

Obstetrical

- 1. Primary survey.
- 2. Oxygen administration to mother, and infant if delivered ("blow by" for infant).
- 3. Secondary survey including a visual vaginal exam for evidence of crowning or hemorrhage.
- 4. Complete patient history.
- 5. Assist in delivery if indicated.
- 6. begin resuscitation if needed.
- 7. Keep infant warm.
- 8. Cut umbilical cord after clamping.
- 9. Prepare for delivery of placenta / massage fundus to help control hemorrhage.
- 10. Assist other medical personnel.
- 11. Document run.

Heat related emergencies

- 1. Primary survey.
- 2. Remove patient from the heat.
- 3. Secondary survey.
- 4. Cool patient.
- 5. Treat associated injuries, if indicated.
- 6. Administer fluid by mouth if patient is conscious and alert, and is not suffering from nausea and vomiting.
- 7. Assist other medical personnel.
- 8. Document run.

Cold related emergencies

- 1. Primary survey.
- 2. Remove patient from the cold environment.
- 3. Secondary survey.
- 4. Warm patient with any means necessary (blankets, dry clothing, yourself.)
- 5. Extremities suffering form possible frostbite should be handled gently (Do not rub extremities to warm, may cause tissue damage.)
- 6. Assist other medical personnel.
- Document run.

First Responder Program Continued

Seizure

- 1. Primary survey.
- 2. Administer oxygen at flow rate according to patients level of distress.
- 3. Protect patient from injury.
- 4. Secondary survey.
- 5. Assist other medical personnel.
- 6. Document run.

Orthopedic injuries

- 1. Primary survey.
- 2. Oxygen if needed (decreased or altered level of conscious.
- 3. Secondary survey.
- 4. Treat injuries as indicate.
- 5. Determine pulse distal to fracture site.
- 6. Assist other medical personnel.
- 7. Document run.

Asthma

- 1. Primary survey.
- 2. Oxygen, hi-flow 15 LPM via NRB.
- 3. Secondary survey.
- 4. Obtain events leading to patient's current condition, and medications taken in attempt to relieve distress.(assist patient in administration of Inhaler or Nebulized medications if condition indicates.)
- 5. Assist other medical personnel.
- Document run.

First Responder Program Continued

Emphysema

- 1. Primary survey.
- Administer oxygen at 1-2 LPM via nasal cannula. IF PATIENT IS IN EXTREME RESPIRATORY DISTRESS DO NOT WITHHOLD A HIGHER FLOW OF OXYGEN!
- 3. Secondary survey.
- 4. Obtain history of events leading to the respiratory distress and medications taken in attempt to reduce the distress.(assist patient in administration of Inhaler or Nebulized Medications if condition indicates)
- 5. Assist other medical personnel.
- 6. Document run.

Spinal injuries

- 1. Primary survey (with c-spine precautions taken).
- 2. Hi-flow Oxygen and/or assist ventalations if indicated.
- 3. Secondary survey.
- 4. Treat other injuries and shock, if necessary.
- 5. Assist other emergency personnel.
- 6. Document run.

RADIO REPORT:

A patient report will be given to the emergency unit enroute. If the patients condition permits the EMT will transmit the report to the responding unit. A first responding company that has more than one EMT assigned to the company will have one EMT give the report to the emergency unit. In the event that the EMT is unable to give the patient report the Officer of the first responder company will relay the report.

The radio report will contain the patient's:

- 1. Age.
- 2. Sex.
- 3. Chief complaint.
- 4. Vital signs.
- 5. Any information concerning current illness or injury.

First Responder Program Continued

DOCUMENTATION:

The First Responder Incident Report is a Quality Improvement tool and should be completed to the best of your ability. A form shall be completed on each emergency call. The report forms will be turned in daily. A entry will be put in the log book on the first responder call.

NOTE:

Medicine, including prehospital care, is a practice and not an art; therefore, treatment modalities change from time to time in an attempt to improve patient care. It must be stressed that all aspects of prehospital care can not be covered in this operations manual. To be a proficient EMT one must stay current with State and Federal rules, regulations, guidelines. Mandates set forth by the Division of Fire Services should also be followed.

INCIDENTS DETERMINED TO BE OUTSIDE THE CITY OF MEMPHIS AND WITHIN SHELBY COUNTY

1. Provisions for Limited Action: Inside the Boundaries of Shelby County.

In the event a Fire Company or EMS Unit is dispatched and arrives on the scene of an operation that is determined to be outside the city limits, the officer or EMS paramedic in charge may take limited action awaiting the arrival of the authorized emergency response agency having jurisdiction.

Upon the arrival and transfer of command to the command officer having jurisdiction, the company or EMS unit must return to service unless approval is granted to remain on the scene through the established mutual aid procedures outlined in the Operations Manual.

Please note the provisions of limited action are restricted to responses within Shelby County only. Personnel are not permitted to take limited action outside Shelby County without mutual aid approval.

BUDDY SYSTEM/TWO IN-TWO OUT

PURPOSE: To comply with OSHA/FEDERAL requirements CFR1910.134 (c)(ii). Also to

provide additional safety measures for our personnel during emergency incidents.

SCOPE: The Standard includes a provision requiring both a buddy system and at least

two (2) standby personnel (2 in/2 out) when firefighters are conducting the

interior attack of an interior structural fire.

INSIDE TEAM(S)

Firefighters operating in the interior of the structure must operate in a buddy system and maintain voice or visual contact with one another at all times. This assists in assuring accountability within the team. Due to the potential of mechanical failure or reception failure of electronic communication devices, radio contact is not acceptable to replace visual or voice contact between the members of the "buddy system" team.

OUTSIDE TEAM(S)

A minimum of two individuals who are properly equipped and trained must be positioned outside the structure before any team(s) of firefighters enter the structural fire.

OSHA requires that one of the two outside person's function is to account for and, if necessary, initiate a firefighter rescue. Aside from this individual dedicated to tracking interior personnel, the other designated person(s) is permitted to take on other roles, such as incident commander in charge of the emergency incident, safety officer or equipment operator. However, the other designated outside person(s) cannot be assigned tasks that are critical to the safety and health of any other employee working at the incident.

The regulations do not require a separate "two-out" team for each team operating in the structure. However, if the incident escalates, if accountability cannot be properly maintained from a single exposure, or if rapid rescue becomes infeasible, additional outside crews must be added. For example, if the involved structure is large enough to require entry at different locations or levels, additional "two-out" teams would be required.

EXCEPTIONS:

OSHA regulations recognize deviations to regulations in an emergency operation where immediate action is necessary to save a life. For fire department employers, initial attack operations must be organized to ensure that adequate personnel are at the emergency scene prior to any interior attack at a structural fire. If initial attack personnel find a **KNOWN** life-hazard situation where immediate action could prevent the loss of life, deviation from the two-in/two-out standard may be permitted, as an exception to the fire department's organizational plan. In this event, the first arriving Officer will advise the Fire Communications Bureau and other responding companies that his team will be entering the building for rescue purposes and that the second arriving company will need to set up a RIT.

GENERAL GUIDELINES:

The first arriving Officer of the Fire Communications Bureau has discretion as to whether or not dispatch an additional company to serve as a RIT.

It is the responsibility of the Incident Commander to determine the need for RIT's (Rapid Intervention Teams), and the necessary equipment.

The second arriving Officer may alter the RIT members after notifying of the IC.

Subsequent IC's will assume responsibility for assuring the integrity and continuity of the established RIT's.

DIVISION OF FIRE SERVICES FIRE COMMUNICATIONS STANDARD OPERATING PROCEDURES

FIRE COMMUNICATIONS BUREAU SECURITY.

Security for this bureau will be maintained at all times. Doors to the bureau are to be kept locked at all times. At no time will a door from the outside or adjacent Bureaus be propped and left open. Non-Fire Communications Bureau personnel and visitors will not enter the dispatch area without first obtaining permission from the Watch Commander on duty. During high-activity times, visiting personnel may be asked by the Watch Commander to refrain from talking or to leave the dispatch area. If at any time a person or persons become unruly, or displays a threatening manner, which could disrupt the operations of the Bureau, and refuses to leave the dispatch area, notify the Police dispatcher, any Fire Investigators on duty and page the Manager of Fire Communications immediately.

Operators and visiting personnel will not <u>openly</u> discuss items which disturb other Operators opinions, items which are controversial, and items which may agitate personal ideals and bring about negativism within the Bureau. This will not be tolerated and Watch Commanders and Officers are to strictly enforce this item and will be held accountable for it's enforcement.

The Fire Communications Bureau is a HIGH SECURITY AREA!

PHONETIC ALPHABET

Fire Communications Operators should use the Phonetic Alphabet when distinguishing letters for apartments, streets, spelling words etc.

phonetic alphabet noun

1. Any of various systems of code words for identifying letters in voice communication.

Letter	Code Word	Pronunciation	Lette	Code Word	Pronunciation
A	ALFA	(AL FAH)	N	NOVEMBER	(NO VEM BER)
В	BRAVO	(BRAH VOH)	O	OSCAR	(OSS CAH)
C	CHARLIE	(CHAR LEE)	P	PAPA	(PAH PAH)
D	DELTA	(DELL TAH)	Q	QUEBEC	(KEH BECK)
E	ЕСНО	(ECK OH)	R	ROMEO	(ROW ME OH)
F	FOXTROT	(FOKS TROT)	S	SIERRA	(SEE AIR RAH)
G	GOLF	(GOLF)	Т	TANGO	(TANG GO)
Н	HOTEL	(HOH TELL)	U	UNIFORM	(YOU NEE
I	INDIA	(IN DEE AH)	V	VICTOR	(VIK TAH)
J	JULIETT	(JEW LEE ETT)	W	WHISKEY	(WISS KEY)
K	KILO	(KEY LOH)	X	X-RAY	(ECKS RAY)
L	LIMA	(LEE MAH)	Y	YANKEE	(YANG KEY)
M	MIKE	(MIKE)	Z	ZULU	(ZOO LOO)

DIVISION OF FIRE SERVICES FIRE COMMUNICATIONS STANDARD OPERATING PROCEDURES

CALL TAKER PROCEDURES FIRE CALLS

SUBJECT: Answering requests for Fire Fighting Service

POLICY: Calltakers shall answer calls for Fire Fighting Service using a standardized

format.

PURPOSE: To provide all Calltakers with a standardized methodology for the interrogation

process during the reporting of fire calls. Professional Calltakers are expected to do their best to <u>accurately and expeditiously</u> gather all <u>appropriate</u> information. Speed is a very critical factor as far as a fire response is concerned. Calltakers will expedite obtaining this information.

The goal of the Division of Fire Services is to have Calltakers complete caller interrogation and have the alarm sent to the Vocalarm within 35 to 40 seconds or better from the time of answering "Fire Department, Where do you need us" on all FIRE CALLS.

Fire Communications Calltakers will obtain the following information and then immediately send the call to the Vocalarm when answering all FIRE CALLS!

- 1. When answering a call, say "Fire Department, Where do you need us?"
- 2. What telephone number can I call you back on, if necessary? (9-1-1 call)
- 2A. What telephone number can I call you back on, if necessary (7 digit)
- 3. Ask the caller "What's the problem? If it's a FIRE, ask "What's on Fire"?
- 4. Send The Call to the Vocalarm for Dispatching! "F4"
- **5. AFTER THE CALL HAS BEEN SENT TO THE VOCALARM FOR DISPATCH THEN!** Advise the calling party we have help on the way, let me ask you a couple more questions.

After this initial information is obtained, the run can then be sent to the Vocalarm for dispatching. After that you may continue to gather additional information from the caller if possible.

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Calltaker Procedures
Continued

PROCEDURE:

1. INITIAL RECEIPT OF A FIRE CALL:

A. When answering a call, say "Fire Department, Where do you need us?"

- 1) Enter the address into the CAD. Do not read the address on the enhanced 911 system to the caller.
- 2) If the enhanced 911 system provides the address, actively compare this with what the caller tells you. It is your responsibility to make sure they match! If they do not, say to the caller "Can you repeat that address back to me so that I can be sure I've got it right?"

2. CONFIRMATION OF 9-1-1 CALL BACK NUMBER:

- A. Confirm the telephone number where the party is calling from.
- B. Ask the caller "What telephone number can I call you back on, if necessary?" DO NOT READ THE NUMBER GIVEN TO YOU BY THE ENHANCED 911 SYSTEM BACK TO THE CALLER.
- C. As the caller tells you the number, actively compare this with the number given by the Enhanced 911 system. IT IS YOUR RESPONSIBILITY TO MAKE SURE THEY MATCH! If the numbers match you may accept this as confirmation of the call-back number.
- D. If the number given by the caller does not match that given by the Enhanced 911 system, say to the caller "That is not the same as the number given to me by the operator. Could you repeat it once more, please?" DO NOT READ THE NUMBER BACK TO THE CALLER.

2A. CONFIRMATION OF SEVEN DIGIT CALL BACK NUMBER:

- A. Ask the caller "What telephone number can I call you back on?"
- B. Enter the number into the CAD.

DIVISION OF FIRE SERVICES FIRE COMMUNICATIONS STANDARD OPERATING PROCEDURES

Calltaker Procedures
Continued

PROCEDURE

3. OBTAINING THE NATURE OF THE FIRE CALL:

A. Ask the caller "What is on Fire?

- 1) If an Apartment, get the Name of the Apartments & Apartment Number! This information will be entered into the computer before the run is sent to the Vocalarm for dispatch.
- 2) If a Business or Commercial Building, get the Name of the Business & any Building Number or the location within the building the fire department is needed!
- 3) If a VEHICLE, also obtain the physical location of the vehicle. If located inside or under a structure, the incident type for that structure will be entered. If it is a commercial-type vehicle, also obtain the type of cargo being carried. If the cargo is a hazardous material, a H1 will be entered as the incident type. An H2 incident type will be entered if the cargo is a flammable liquid.
- 4) When the call is for a hazardous material incident, the calltaker will also obtain the name of the chemical, whether a fire is involved, quantity of substance involved, and any other information pertinent to the incident.
- 5) When an alert is received from Memphis International Airport, the calltaker will obtain the following information:
 - 1. Alert level (Alert 1, 2, or 3).
 - 2. Runway number.
 - 3. Problem with the aircraft.
 - 4. Number of souls on board.
 - 5. Quantity of fuel on board.
 - 6. Type of aircraft.

TELEPHONE COURTESY: Operators will be courteous at all times. *Courteous procedures* will be used to take control of conversations with hysterical callers during emergencies. Remember, callers (*especially* those who are aggressive or abusive) behave in this way because they are frightened and feel that they have no control of the situation. Operators may need to use a firm tone to take control of certain situations but at no time shall operators shout, or become abusive or rude to our

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customers, the citizens.			

Calltaker Procedures
Continued

PROCEDURE:

4. PROCESS THE FIRE CALL:

A. Send The Call to the Vocalarm for Dispatching! F4

1) Insert a minimum amount of text in the remarks line, just enough that will suffice to get the call dispatched by the Vocalarm. Then Send! Send! Send!

5. AFTER THE CALL HAS BEEN SENT TO THE VOCALARM FOR DISPATCH THEN!

Advise the calling party we have help on the way, let me ask you a couple more questions.

- A. Obtain a Cross-street from the Calling Party.
- B. In the absence of an address from an enhanced 911 system, say to the caller "Can you repeat the address back to me so that I can be sure I've got it right?" Do not read the address back to the caller.
- C. As the caller repeats the address, actively compare this with your written or CAD record. IT IS YOUR RESPONSIBILITY TO MAKE SURE THEY MATCH! If they do not, say to the caller "That is not the address you originally gave me. Could you repeat it once more, please?"

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CALL TAKER PROCEDURES FOR BUSINESS AND OPERATOR LINES

SUBJECT: Answering Fire Department Business Lines

POLICY: Calltakers shall answer the Fire Departments Business Lines and Operator

Lines using a standardized format.

PURPOSE: To provide all Calltakers with a standardized method for answering business

and Operator lines.

PROCEDURE:

1. Answering Fire Department Business Lines and Operator Lines.

A. Business lines will be answered with "Fire Department" and Operator lines will be answered with the Operator's "Last Name".

EXAMPLE: (Business line) Oper: "Fire Department"

(Operator line) Oper: "Smith"

2. TRANSFERRING CALLS RECEIVED ON THE BUSINESS LINES.

A. Calls received on the business line will be transferred as needed. If the line being transferred to is busy, the calltaker will advise the caller and give them a choice of holding or calling back. Calls will not be transferred off of the emergency line (458-3311) except in the case of an EMS unit calling a hospital emergency room, or a 911 call that will be transferred from the positron to another agency due to an emergency. Others will be asked to call back on the business line (458-8281).

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH IMPLEMENTATION POLICY

AMENDED: May 1, 1995

POLICY: Call receiving and dispatch for medical assistance shall be provided in a standardized manner following approved Medical Priority Dispatch System (MPDS) protocols for caller interrogation, determination of appropriate response configurations and modes, and provision of post dispatch and prearrival instructions.

PURPOSE: To provide all Emergency Medical Dispatchers (EMD's) with the necessary tools and skills relating to the safe and effective provision of Emergency Medical Dispatch services, which include interrogation of the caller; sending an appropriate response; providing telephone assistance; and communicating necessary information to unit personnel and other responders.

PROCEDURE:

1. MEDICAL PRIORITY DISPATCH PROTOCOL SYSTEM

- A. A flip chart card system, containing protocols for Emergency Medical Dispatching, shall be provided for each call-taking and dispatch position.
- B. This protocol system will provide standardized key questions, post-dispatch instructions, pre-arrival instructions and response-based codes.
- C. The MPDS protocol File (Card System) shall be kept in the dispatch center at all times.
- D. The Advanced Medical Priority Dispatch Protocols have been approved by the Manager of Communications and Medical Director of the Division of Fire Services.
- E. The Advanced Medical Priority Dispatch Protocols shall be followed on all EMS-related emergency calls.

Calltaker Procedures
Continued

2. INTERROGATION

- A. In addition to the information outlined for call processing, the EMD shall always ask the following questions of the caller:
 - 1. What's the problem? / What happened? (the Chief Complaint)
 - 2. How old is s/he? (approximate if necessary)
 - 3. Is s/he conscious?
 - 4. Is s/he breathing?
- B. All attempts to obtain Case Entry and Key Question information from the caller will be made by utilizing good communication techniques and reading the questions exactly as written in the protocol.
 - 1. If the initial pre-structured question is not understood, or an appropriate answer is not initially provided by the caller, the EMD may re-phrase the question in an appropriately clarified form.
 - Questions may only be omitted if the answer is obvious or has already been clearly provided. However questions which relate to the priority symptoms of altered level of consciousness, breathing problems, chest pain, and severe bleeding MUST be asked on every occasion on which they appear.
 - 3. EMD's may alter the tense of questions to the first person in the event that the caller is the patient (that is, for 'first party' calls).
 - 4. Status of consciousness, including "alertness" and "ability to talk" may be inferred as obvious *when the caller is the patient*.

January 5, 2000

Calltaker Procedures
Continued

3. RESPONSE CONFIGURATIONS AND MODES

- A. The MPDS interrogation protocols will be used to select and enter the currently used situation codes in the appropriate field of the CAD system.
- B. The MPDS determinant code will be entered in the appropriate field on the CAD system.
- C. Relevant Patient information will be entered in the appropriate space on the CAD system.
- D. First Responders will be dispatched as recommended by the CAD system.
- E. Other response configurations and modes will not be altered at this time by the use of the MPDS.

Calltaker Procedures
Continued

4. RELAY OF INFORMATION TO RESPONDING UNITS

- A. The following shall be regarded as the minimum information to be passed to all responding personnel. It should be relayed to units dispatched from quarters, and to units that are dispatched on the air.
 - 1. The Address & Cross-street of the Alarm
 - 2. The Chief Complaint
 - 3. The age of the patient
 - 4. The MPDS determinant code
 - 5. The status of consciousness
 - 6. The status of breathing
- B. In addition, under normal working conditions, the dispatcher should also relay to all responders the answers obtained to the key questions. This should include positive, negative, and "unknown" responses. This information should be withheld only if radio traffic or excessive workload does not allow its transmission. Subsequently it is expected that it will be provided to responders for the majority of calls.
- C. Should additional information become available to dispatchers after responders have been mobilized but prior to their arrival on scene this should also be passed to responding units. Additional information may be realized as a result in a change in the patient's condition during administration of PDI's and PAI's, or after a second call on a case that has been received.

Calltaker Procedures
Continued

5. POST-DISPATCH INSTRUCTIONS

- A. The EMD will refer to the Post-Dispatch Instruction (PDI) list for the selected Chief Complaint after the dispatch of responding units has been initiated. The EMD giving PDIs will follow the protocol, giving instructions appropriate to each individual call, and avoiding free-lance information unless it enhances and does not replace the written protocol.
- B. PDIs shall be provided to the caller whenever *possible* and *appropriate*.
- C. Whenever possible, the EMD receiving the call should provide the PDIs themselves.
- D. Should the workload of the dispatch center require it (e.g. as a result of unanswered incoming emergency calls) the EMD MUST apply the "emergency rule" and temporarily suspend the provision of PDIs to callers at this time. This is vital in order to ensure the safe and effective operation of the dispatch center for all individuals requiring its services. Should unanswered emergency calls or other vital operations require it EMDs should place callers receiving PDIs on hold, giving a reason for doing so and advising the caller they will return as soon as possible.

Calltaker Procedures
Continued

6. PRE-ARRIVAL INSTRUCTIONS

- A. PAIs shall be provided directly from the scripted text listed on each PAI Panel Logic Protocol Script. The EMD giving PAIs will follow the script, avoiding free-lance information, unless it enhances and does not replace the written protocol scripts.
- B. Pre-Arrival Instructions (PAIs) shall be provided to the caller whenever *possible* and *appropriate* to do so.
- C. Whenever possible, the EMD receiving the call should provide the PAIs themselves.
- D. Should the workload of the dispatch center require it (e.g. as a result of unanswered incoming emergency calls) the EMD MUST apply the "emergency rule" and temporarily suspend the provision of PAIs to callers at this time. This is vital in order to ensure the safe and effective operation of the dispatch center for all individuals requiring its services. Should unanswered emergency calls or other vital operations require it EMDs should place callers receiving PAIs on hold, giving a reason for the necessity of doing so and advising the caller that they will return to them as soon as possible.

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Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH CASE ENTRY COMPLIANCE POLICY

STATEMENT

AMENDED: April 14, 1995

POLICY: Effective April 14, 1995 at 08:00 hours, each Emergency Medical Dispatcher

answering a request for EMS shall ask for and attempt to obtain all case entry level information after location and call back number have been obtained and verified on every case. It is the intent of this policy that the case entry level protocol shall be followed 100% of the time, with the exception of first and

fourth party calls.

PURPOSE: To ensure proper case entry procedure and to effect an increase in protocol

compliance. This will lead to more accurate coding of calls, provision of the correct pre-arrival and post-dispatch instructions and unit response

configuration and mode assignments

PROCEDURE: The case entry questions shall be asked by the EMD, in order and phrased as shown below, to obtain the following information:

- 1. What's the problem? / What happened? (the Chief Complaint)
- 2. How old is s/he? (approximate if necessary)
- 3. Is s/he conscious?
- 4. Is s/he breathing?

EMDs shall not assume the existence or absence of any case entry level information based on background noise or other factors that may give the impression that the patient is conscious and breathing. EMDs shall not ask "is s/he alert" with the assumption that if the caller says yes that they have accurate information regarding status of consciousness, breathing, and level of consciousness. This is an incorrect application of the protocol and can lead to serious errors. It is recognized that a minority of callers may refuse or be unable to provide the answers to case entry questions. EMDs shall not be held accountable for this provided they have made a reasonable attempt to ask these questions initially. EMDs will receive regular feedback from the QIU and will be requested to explain and justify any errors or omissions. The Division of Fire Services expects 100% compliance on attempts to gather case entry level information. Outside agency (fourth party) referrals may be the only exception to this policy. With regard to first party callers (i.e. when the caller is the patient) the complaint officer may omit questions three and four.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH QUALITY IMPROVEMENT PROCESS, ROLES

AND RESPONSIBILITIES

AMENDED: May 1, 1995

POLICY: The quality improvement process shall follow a standardized procedure as

detailed below and as required by the National Academy of Emergency

Medical Dispatch to meet accreditation standards.

PURPOSE: Provide all dispatch personnel with the necessary understanding and skills as

they relate to the efficient and effective provision of quality assurance for the Medical Priority Dispatch System. Such quality assurance processes shall be sufficient to meet the requirements of the National Academy of Emergency Medical Dispatch for accreditation of this agency as a Dispatch Center of

Excellence.

PROCEDURE:

1. QUALITY IMPROVEMENT CASE REVIEW

- A. A 10% minimum sampling of all EMS calls shall be randomly selected and reviewed monthly by the EMD Quality Improvement Unit to assure compliance to the MPDS protocol at acceptable pre-set levels as defined within NAEMD accreditation standards.
- B. All cardiac arrest, choking, and emergency childbirth cases shall be reviewed and counted as a portion of the 10% of total cases required.
- C. An approximately equal number of calls shall be reviewed for each individual EMD.
- D. The level of compliance required to meet NAEMD accreditation standards is 90% or greater for each individual dispatcher to all listed protocol components previously defined, with the exception that Case Entry interrogation shall exceed a 95% compliance rate.

Calltaker Procedures
Continued

2. CASE REVIEW FEEDBACK PROCESS

- A. Completed Case Evaluation Templates (CETs) generated by the PDQA database, with either an Exemplary Dispatcher Performance Report or a Dispatcher Non-compliance Report attached will be forwarded to the Watch Commanders on a weekly basis.
- B. Watch Commanders or QIU Officer will review each CET / Performance Report with the relevant dispatcher on a one-to-one basis. Both the Watch Commanders and the EMD may add their comments to the forms and both MUST sign it.
- C. If circumstances dictate the Watch Commander or QIU Officer should develop an action plan and document this on the form. A deadline for completion of the action plan MUST be given. Action plans may be appropriate if remedial training is required or, if in the case of exemplary performance, it will be beneficial to share details of a case or a dispatcher's actions with their colleagues.
- D. Watch Commanders or QIU Officer may use the form to request further QIU follow-up or action if required. Examples of QIU action that could be suggested include requests for a particular Continuing Dispatch Education topic to be covered, for a letter of commendation to be submitted, or for a problem to be raised at the Medical Dispatch Review Committee meeting.
- E. Completed forms must be returned to the QIU within fourteen days of their receipt by the Watch Commander.
- F. The QIU must be informed of the completion of any action plan noted on the form.
- G. A copy of the completed form will be kept by the QIU in the EMD's QIU file.
- H. Copies of the completed form will be distributed by the QIU to the EMD concerned, the Manager of Communications, the Medical Director, and, for the life of the implementation contract, to Medical Priority Consultants (MPC).

Calltaker Procedures
Continued

3. QIU DATABASE INDIVIDUAL EMD COMPLIANCE REPORTS

- A. Compliance data for individual EMDs shall be generated from the PDQA database and forwarded to Watch Commanders on a monthly basis with either an Exemplary Compliance report or a Non-Compliance Action Plan attached. Data on individual dispatchers performance will **not** be discussed with their peers.
- B. Watch Commanders will review each Compliance Report with the relevant dispatcher on a one-to-one basis. Both the Watch Commander and the EMD may add their comments to the forms and both **MUST** sign it.
- C. Action plans MUST be developed if a Non-Compliance Action Plan has been forwarded with the Compliance Report. A deadline for completion of the action plan MUST be given.
- D. Watch Commanders may use the form to request further QIU follow-up or action if required.
- E. Completed forms must be returned to the QIU within fourteen days of their receipt by the Watch Commander.
- F. The QIU must be informed of the completion of any action plan noted on the form.
- G. A copy of the completed form will be kept by the QIU in the EMD's QIU file.
- H. Copies of the completed form will be distributed by the QIU to the EMD concerned, the Manager of Communications, the Medical Director, and, for the life of the implementation contract, to Medical Priority Consultants (MPC).

Calltaker Procedures
Continued

4. QIU DATABASE SHIFT COMPLIANCE REPORTS

- A. Compliance data for each shift overall shall be generated from the PDQA database and posted on the MPDS board in dispatch at monthly intervals.
- B. The Manager of Communications will review the compliance data for each shift with the Watch Commander on a one-to-one basis each month. Copies of any action plan required should be forwarded to the QIU for record keeping.
- C. The QIU must be informed of the completion of any action plan.
- D. A copy of each Shift Compliance Report will be kept by the QIU in the Shift's QIU file.
- E. Copies of the Shift Compliance Report will be distributed by the QIU to the Manager of Communications, the Medical Director, the membership of the MDRC and, for the life of the implementation contract, to Medical Priority Consultants (MPC).

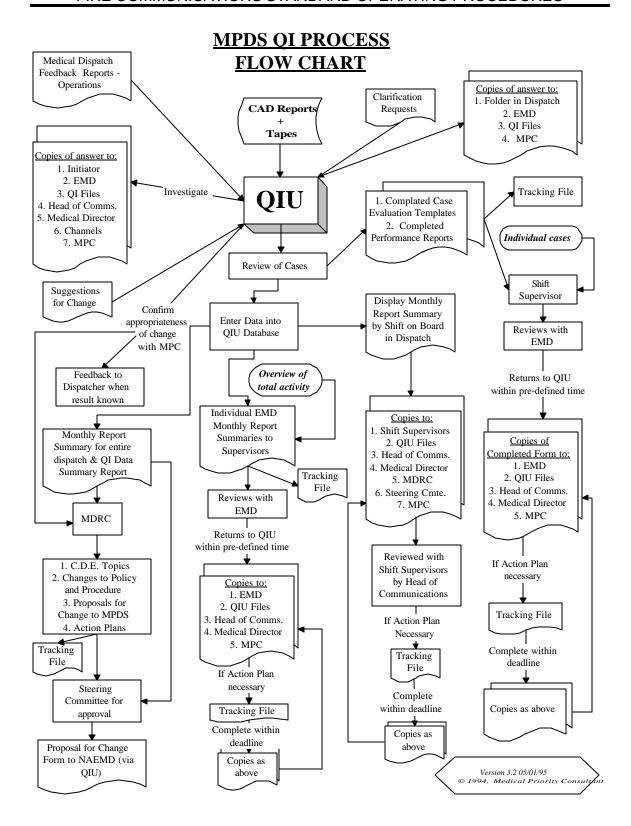
5. QIU DATABASE DISPATCH SUMMARY COMPLIANCE REPORTS

- A. A Dispatch Summary Compliance Report will be generated from the PDQA database and copied to each member of the MDRC at weekly intervals, with a PDQA QI Data Summary report at monthly intervals.
- B. The MDRC will review the Dispatch Summary Compliance Report at monthly intervals (and the QI Data Summary report at monthly intervals) and develop an action plan if appropriate. Copies of any action plan formulated should be forwarded to the QIU for record keeping.
- C. The QIU and MDRC membership must be informed of the completion of any action plan.
- D. A copy of each Dispatch Summary Compliance Report and QI Data Summary report will be kept by the QIU in the Dispatch QIU file.
- E. Copies of the Dispatch Summary Compliance Report and QI Data Summary report will be distributed by the QIU to the Manager of Communications, the Medical Director, the membership of the MDRC and, for the life of the implementation contract, to Medical Priority Consultants (MPC).

Calltaker Procedures
Continued

6. MEDICAL DISPATCH FEEDBACK REPORTS

- A. These forms will be made available to all field personnel who respond to EMS calls. They will be utilized to provide feedback from the field to dispatch in the event of exemplary dispatcher performance or if a case proves problematic.
- B. Completed forms will be forwarded directly to the QIU via the Unit Tickets.
- C. On receipt of a form the QIU will review the tape of the relevant call and discuss it with the EMD(s) who processed the call and their Watch Commander if warranted.
- D. A reply to the initiator of the query or feedback will be provided within fourteen days of receipt of the form by the QIU. In the first instance and where feasible this will be in the form of a telephone call to the initiator.
- E. The completed Medical Dispatch Feedback Report will be returned to the initiator.
- F. Copies of the completed Medical Dispatch Feedback Report will be kept by the QIU in the relevant EMD's file and in a file dedicated to completed Medical Dispatch Feedback Reports.
- G. Copies of the completed Medical Dispatch Feedback Report will be distributed by the QIU to the Manager of Communications, the Medical Director, and, for the life of the implementation contract, to Medical Priority Consultants
- H. Medical Dispatch Feedback Reports MUST be completed in a professional manner. Forms which are submitted containing aggressive or abusive language will be returned by the QIU to the initiator, without investigation, for resubmission. A copy of such forms will be forwarded by the QIU to the Manager of Communications.



Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH CONTINUING DISPATCH EDUCATION

PROCESS, ROLES AND RESPONSIBILITIES

AMENDED: May 1, 1995

POLICY: The Continuing Dispatch Education (CDE) process shall follow a standardized

procedure as detailed below and as required by the National Academy of

Emergency Medical Dispatch to meet accreditation standards.

PURPOSE: Provide all dispatch personnel with the necessary understanding and skills as

they relate to the efficient and effective provision of Continuing Dispatch Education for the Medical Priority Dispatch System. Such Continuing Dispatch Education processes shall be sufficient to meet the requirements of the National Academy of Emergency Medical Dispatch for accreditation of this agency as a

Dispatch Center of Excellence.

PROCEDURE:

1. CDE PROGRAM MANAGEMENT

- A. The MDRC (in conjunction with the MPDS QIU Coordinator) shall be responsible for defining the topics that the CDE program will address.
- B. Appropriate CDE topics may be identified in a number of ways:
 - I. As a result of the MDRC's recommendations (based on the QIU's findings)
 - II. Via Supervisor's action plan's or requests for further action by the QIU
 - III. Via requests from EMDs
- C. The MPDS QIU Coordinator shall be responsible for scheduling educational opportunities as necessary to address the needs identified above.

Calltaker Procedures Continued

- D. The MPDS QIU Coordinator shall be responsible for ensuring that necessary educational opportunities are:
 - I. Delivered by *appropriately* qualified personnel (not *necessarily* an EMD Instructor)
 - II. Adequate in their content / format to address the identified learning need / objective
 - III. Relevant to EMDs and their associated work
 - IV. Attended by all EMDs
- E. The MPDS QIU Coordinator shall be responsible for ensuring that appropriate records are maintained regarding the CDE program in the QIU filing system and for each EMD individually.
- F. The MPDS QIU Coordinator shall be responsible for ensuring that a CDE Lesson Plan is completed to an adequate standard for all classroom based education.

2. MEETING NAEMD RE-CERTIFICATION REQUIREMENTS

- A. The MPDS QIU Coordinator shall be responsible for ensuring that all EMDs are given adequate opportunity to meet NAEMD re-certification requirements.
- B. If it appears likely that an EMD will not meet NAEMD re-certification requirements the MPDS QIU Coordinator must inform that individual's Watch Commander at the earliest opportunity.
- C. EMDs are ultimately responsible for ensuring that they attend sufficient educational opportunities to meet NAEMD re-certification requirements. They must alert their supervisor of any likely problems in this area.
- D. Failure to maintain EMD certification could lead to disciplinary action including termination.

Calltaker Procedures Continued

3. TYPES OF CDE

- A. The following are acceptable formats and their associated maximum hours for CDE:
 - I. Workshops and seminars (16 hours minimum / maximum)
 - II. Attendance at planning and management meetings (e.g. MDRC) (8 hours maximum)
 - III. Quality assurance and case review (8 hours maximum)
 - IV. Review of EMS related audio, video and written materials (4 hours maximum)
 - V. Public education (4 hours maximum)
 - VI. MPDS Protocol review (4 hours maximum)
 - VII. Miscellaneous, such as ride-alongs and work experience (4 hours maximum)
- B. The minimum CDE requirement in any given year shall be twelve hours of completed CDE per EMD, at least eight hours of which shall be classroom in nature.
- C. In *addition* to the CDE hours, types, and topics discussed above each EMD must maintain current CPR certification to AHA standards. CPR recertification shall be provided by the QIU at scheduled intervals.
- D. The bulk of the subject matter accepted as fulfilling NAEMD requirements will be directly related to the science of Emergency Medical Dispatch and the use of the MPDS. However, other EMS-related material will be considered for its educational relevance.

Calltaker Procedures
Continued

4. CDE PROGRAM OBJECTIVES

- A. Development of a better understanding of telecommunications and of the EMDs specific roles and responsibilities.
- B. Enhancement of on-line skills in the use of P.A.I.s and in all emergency telephone procedures within the practice of EMD.
- C. Improving skill in the use or application of all component parts of the MPDS, including interrogation and prioritization
- D. Providing opportunities for discussion, practice of skills, and for constructive feedback of performance.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH PRESS INFORMATION POLICY

AMENDED: May 1, 1995

POLICY: Effective the date of this policy all dispatch staff will follow the procedure

described below to alert the dispatch center administration of EMD cases of

potential interest to the press.

PURPOSE: To provide the Division of Fire Services Dispatch staff with a procedure which

will ensure that cases potentially providing opportunities for positive publicity

are identified in a timely manner to the Public Information Officer.

PROCEDURE:

1. Pre-Arrival Instruction Cases

- A. By definition this will include all cardiac arrest, choking, and emergency childbirth cases.
- B. The QI Officer will review the previous day's (or weekend's) cases at the beginning of each of his shifts to identify those calls for which PAIs were given.
- C. The QI Officer will then briefly review the audio recording of each of these calls for examples of exemplary performance, unusual or interesting circumstances, or significant impact and patient outcome.
- D. The audio tapes of cases which are identified as being of special interest will then be taken immediately to the Manager of Communications. He will then personally review the tapes and will pass details of those he feels to be suitable to the Public Information Officer.
- E. The Public Information Officer will handle initial contacts with the press and coordinate any further related activity.

Calltaker Procedures Continued

2. CALLS OF POTENTIAL PRESS INTEREST OTHER THAN PAIS

- A. Watch Commanders should make a special attempt to identify any call which may be of interest to the press which does not fall into the category of PAI administration. The involvement and support of all dispatch staff will be essential to facilitate this.
- B. Watch Commanders should promptly pass an audio tape of any call so identified to the Manager of Communications.
- C. The Manager of Communications will then follow the same steps as identified in section I above.

3. PROBLEMATIC CASES

- A. Watch Commanders must make every attempt to identify problematic cases that may attract adverse press interest.
- B. Details of these cases, accompanied by an audio tape, must be passed to the Manager of Communications with the utmost urgency. This will allow adequate time for preparation of a response.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH CERTIFICATION POLICY

AMENDED: May 1, 1995

POLICY: Staff employed in the position of Fire Alarm Operator are required to gain both

initial certification as an Emergency Medical Dispatcher and to maintain this

qualification via the relevant recertification process.

PURPOSE: To inform all Emergency Medical Dispatchers (EMDs) of the requirements for

certification and recertification.

PROCEDURE:

1. EMERGENCY MEDICAL DISPATCHER CERTIFICATION.

- A. All current and future personnel employed in the position of Fire Alarm Operators are required to obtain Emergency Medical Dispatcher Certification with the National Academy of Emergency Medical Dispatch (NAEMD).
- B. The Division of Fire Services will provide the necessary training and re-training opportunities to facilitate acquisition of this qualification.
- C. In the event that an employee does not pass the certification examination on the first attempt they will be provided with supportive training based on feedback received form the NAEMD regarding areas of poor performance. They will then be invited to take the re-test conducted by the NAEMD via telephone.
- D. Should the Communications Operator still be unsuccessful in passing the re-test they will be invited to participate in a further complete EMD course. They may then take the certification examination and, if necessary, the re-test on one further occasion.

Calltaker Procedures
Continued

2. RECERTIFICATION

- A. Communications Operators are required to maintain current EMD certification as mandated by the NAEMD. This currently requires completion of a minimum of twenty-four hours Continuing Dispatch Education per two year period, achieving a pass mark in an open book EMD examination at two yearly intervals, and maintaining current CPR certification.
- B. The Division of Fire Services will provide all necessary opportunities for completion of the Continuing Dispatch Education requirement and CPR recertification. It will also maintain records of your CDE and certification status to assist you in maintaining your qualification.
- C. Details of CDE requirements are contained in a separate specific policy.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH REQUEST FOR CLARIFICATION REVIEW

POLICY

AMENDED: MAY 1, 1995

POLICY: Supervisors shall review all new and previously un-reviewed requests for

clarification and their associated answers, as found in the MPDS folder, with

EMDs during every shift.

PURPOSE: To provide all Emergency Medical Dispatchers (EMDs) with the opportunity to

enhance their skills in the use of the MPDS by reviewing the questions (and the

associated answers) raised by their peers regarding the use of this system.

PROCEDURE:

1. MPDS FOLDER

- A. A folder is provided in the dispatch center that allows EMDs to raise questions regarding the use of the MPDS.
- B. All questions, no matter how seemingly trivial, will be answered in writing.
- C. Blank "Request for clarification forms" are provided for dispatch personnel's use.
- D. Upon completing the form, replace it in the appropriate section of the folder.
- E. This folder is regularly reviewed by the QI Officer for new questions to which he or she will promptly provide a written response, a copy of which will be placed in the folder.
- F. It is recognized that questions raised by EMDs and the associated answers provided are likely to provide an excellent learning opportunity for all EMDs using the system.

Calltaker Procedures
Continued

2. WATCH COMMANDER'S RESPONSIBILITY

- A. At least once during each shift Watch Commanders will review the contents of the MPDS folder for new and previously un-reviewed requests for clarification.
- B. At least once during each shift Watch Commanders will review clarification requests so identified with each EMD in their team, either in a group format or on a one to one basis, to ensure that all staff understand the implication of each query raised and its associated answer.

Calltaker Procedures
Continued

SUBJECT: CALLTAKERS ANSWERING REQUESTS FOR EMERGENCY MEDICAL SERVICE

AMENDED: MAY 1, 1995

POLICY: Emergency Medical Dispatchers shall answer calls for medical assistance using a standardized format. This may be clarified and enhanced when necessary but may not be unjustifiably altered or abandoned. If an EMD applies all relevant techniques but the caller still refuses to cooperate the EMD will not be considered to be at fault.

PURPOSE: To provide all Emergency Medical Dispatchers (EMDs) with a standardized methodology for establishing and maintaining control of the data gathering and interrogation process during the receipt of emergency calls. Professional EMDs are expected to do their best to accurately gather all appropriate information and to give PDIs and PAIs when possible, appropriate, and necessary.

PROCEDURE:

- 1. INITIAL RECEIPT OF AN EMERGENCY MEDICAL CALL
 - A. When answering a call, say "Fire Department, Where do you need us?"
 - B. Enter the address into the CAD. Do not read the address on the enhanced 911 system to the caller.
 - C. If the enhanced 911 system provides the address, actively compare this with what the caller tells you. It is your responsibility to make sure they match! If they do not, say to the caller "Can you repeat that address back to me so that I can be sure I've got it right?"
 - D. In the absence of an address from an enhanced 911 system, say to the caller "Can you repeat the address back to me so that I can be sure I've got it right?" Do not read the address back to the caller.
 - E. As the caller repeats the address, actively compare this with your written or CAD record. IT IS YOUR RESPONSIBILITY TO MAKE SURE THEY MATCH! If they do not, say to the caller "That is not the address you originally gave me. Could you repeat it once more, please?"

Calltaker Procedures
Continued

PROCEDURE:

- 1. INITIAL RECEIPT OF AN EMERGENCY MEDICAL CALL Continued
 - F. Obtain a Cross-street from the Calling Party.

Calltaker Procedures Continued

- 2. CONFIRMATION OF 9-1-1 CALL BACK NUMBER
 - A. Confirm or enter the telephone number directly into the computer where the party is calling from.
 - B. Ask the caller "What telephone number can I call you back on, if necessary?" DO NOT READ THE NUMBER GIVEN TO YOU BY THE ENHANCED 911 SYSTEM BACK TO THE CALLER.
 - C. As the caller tells you the number, actively compare this with the number given by the Enhanced 911 system. IT IS YOUR RESPONSIBILITY TO MAKE SURE THEY MATCH! If the numbers match you may accept this as confirmation of the call-back number.
 - D. If the number given by the caller does not match that given by the Enhanced 911 system, say to the caller "That is not the same as the number given to me by the operator. Could you repeat it once more, please?" DO NOT READ THE NUMBER BACK TO THE CALLER.
- 3. CONFIRMATION OF SEVEN DIGIT CALL BACK NUMBER
 - A. Ask the caller "What telephone number can I call you back on?"
 - B. Enter the number into the CAD.
- 4. OBTAINING THE NATURE OF THE EMERGENCY
 - A. Ask the caller "What's the problem? What happened?"
 - B. If the caller starts to give you a long medical history, rephrase and repeat the question as "What's the problem now? What's happening now?"
 - C. If the caller's response does not enable you to select a Chief Complaint card, seek clarification of the chief complaint they gave you *if possible*.
 - D. If you are still unable to identify the correct Chief Complaint card, select either card 26 (second party callers) or card 32 (third party callers).



Calltaker Procedures Continued

F. Politely but firmly focus the caller on answering *all* questions *as you ask them*. Do not allow callers to offer additional information until they have answered all scripted questions. If callers lose their focus and do not concentrate on answering questions as you ask them, say "Sir/Ma'am I need you to answer this question so that I can get help to you as quickly as possible." Repeat this as often as necessary using exactly the same phrasing.

5. CHIEF COMPLAINT CARDS

- A. Go to the appropriate Chief Complaint card when you have gathered all Case Entry information.
- B. Say to the caller "The ambulance is on the way to help you . Please stay on the line. I need to ask you a few more questions so that I can tell you what to do to help the patient."
- C. Ask all of the Key Questions in the order they appear on the card and *following script*.
- D. Politely but firmly focus the caller on answering all questions *as you ask them*. Do not allow callers to offer additional information until they have answered all scripted questions. If callers loose their focus and do not concentrate on answering questions as you ask them, say "Sir/Ma'am I need you to answer this question so that I can tell you exactly what to do to help." Repeat this as often as necessary *using exactly the same phrasing*.

Calltaker Procedures
Continued

6. COPING WITH DISTRESSED, HYSTERICAL, AGGRESSIVE AND ABUSIVE CALLERS

- A. It is recognized that callers who fall into these categories represent a great challenge to the EMD. However, all of these callers (especially those who are aggressive or abusive) behave in this way because they are frightened and feel that they have no control of the situation. The following techniques will help to calm them but require a very professional approach from the EMD. YOU MUST NOT LET THE CALLER'S ATTITUDE AFFECT THE WAY YOU BEHAVE.
- B. **REMAIN CALM AND COURTEOUS AT ALL TIMES**. This is regardless of how the caller behaves, or what s/he says or does.
- C. **KEEP YOUR VOICE LEVEL, EVEN AT ALL TIMES**. Do not shout at the caller, or even raise your voice.
- D. NEVER DISPLAY IRRITATION WITH THE CALLER.
- E. NEVER THREATEN THE CALLER.
- F. **GIVE AN EXPLANATION, WITH A MOTIVE**, FOR EVERYTHING YOU DO, OR ASK THE CALLER TO DO. For instance, explain why you are asking key questions (so that you can tell them how to help the patient) or why you need to put the caller on hold (so that you can get the ambulance on the way to them).
- G. TELL THEM THAT THE AMBULANCE IS ON THE WAY. Repeat this as often as is necessary.
- H. **USE THE FIRST NAME OF CHILDREN**. This may also be a helpful technique for *hysterical* adults.
- I. <u>USE 'REPETITIVE PERSISTENCE</u>.' This works for many abusive and aggressive callers as well as those who are hysterical. *Give the caller an action, followed by a reason for complying with this action.* Repeat this, using exactly the same phrasing, and in a calm level voice, as often as is necessary until the caller listens and cooperates. Be prepared to use this technique more than once.

Calltaker Procedures Continued

- J. <u>USE 'POSITIVE AMBIGUITY</u>.' Do not 'lie' to the caller, even if motivated by kindness. Do not make promises that are not within your ability to keep. Examples follow:
 - I. The caller asks "How long will the ambulance be?" You should reply "The ambulance is on the way. It will be with you as soon as possible." DO NOT GIVE AN EXACT TIME OF ARRIVAL. The ambulance may break down or get stuck in traffic.
 - II. The caller asks "The patient is going to be all right, isn't s/he?" You should reply "Everyone will do the best they can to help."
 - III. The caller asks "Will this save him/her?" You should reply "This will help give him/her the best possible chance."
- K. GIVE THE CALLER FIRM BUT GENTLE ENCOURAGEMENT. If the caller says "Nothing's working!" Say "Don't give up. You've got to keep doing it. This will keep him/her going until the ambulance crew arrives."
- L. ASK IF THERE IS SOMEONE ELSE YOU CAN SPEAK TO. This should only be used as a last resort, as you will no longer be in a position to calm the caller.

7. PRE-ARRIVAL INSTRUCTIONS

- A. DO NOT ASK FOR PERMISSION TO GIVE PRE-ARRIVAL INSTRUCTIONS. Do not say "Would you like me to tell you how to do CPR?"
- B. If the caller refuses to follow PAIs, say "The ambulance is on its way, but this is important to give the patient the best possible chance until it arrives." Repeat as necessary.
- C. If the caller stills refuses to administer aid, ask if there is someone else you can speak to.

Calltaker Procedures Continued

8. THIRD PARTY CALLS

- A. Do *not* assume that third party callers know nothing, even if they say they know nothing!
- B. Always ask all Case Entry and Key Questions.
- C. Always ask the caller if they will go back to the patient to render aid. If they agree, give PDIs and PAIs *as possible, appropriate, and necessary*.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH OBVIOUS DEATH POLICY

AMENDED: APRIL 6, 1995

POLICY: The following defines the meaning of the term 'obvious death' for dispatch

purposes and provides a protocol to be followed by dispatch staff in the event they identify a patient as being a victim of 'obvious death.' It also defines the actions to be taken in the event that the caller identifies the patient has signed a 'Living Will' or is subject to a 'Do Not Resuscitate order'.

PURPOSE: To provide EMDs with a protocol to follow with regard to confirming

obvious death or in the event that a Living Will or Do Not Resuscitate is

identified, and the subsequent actions they should take.

PROCEDURE:

1. OBVIOUS DEATH DEFINITION

- A. For dispatch purposes 'Obvious Death' is defined as meaning that a patient's condition can be identified, as the sole result of information being provided by a 911 caller and without doubt or fear of error, as being incompatible with life. This information would in turn indicate that it would be inappropriate for an EMD to offer Pre-Arrival CPR Instructions.
- B. The Medical Director has agreed that the following conditions may be considered by the dispatcher to constitute 'Obvious Death' in the event that the patient is *confirmed* as being pulseless and non-breathing:
 - 1) Decapitation
 - 2) Decomposition
 - 3) Non-recent traumatic death (*confirmed* as being greater than one hour)
 - 4) Non-recent expected death (*confirmed* as being greater than one hour)
 - 5) Severe dismemberment obviously incompatible with life
 - 6) Incineration
 - 7) Submersion (*confirmed* as being greater than two hours)
 - 8) Rigor mortis or lividity
- C. The dispatcher must be sure that the presence of at least one of the above conditions is *unquestionable*.

Calltaker Procedures Continued

- D. EMD's should not *routinely* question callers about the presence or absence of the above listed questions. The EMD should only attempt to identify the existence of these conditions in the event that the caller suggests that the patient is not salvageable.
- 2. ACTION IN THE EVENT OF IDENTIFICATION OF UNQUESTIONABLE OBVIOUS DEATH
 - A. Code the call as 9-B-1, and inform all responders of your reason for doing so.
 - B. Do not provide PAIs.
 - C. If possible, keep the caller on the line and provide emotional support.
 - D. If none of the conditions listed in section 1.B. are present the EMD **MUST** provide CPR Pre-Arrival Instructions as per protocol.
- 3. LIVING WILLS AND DO NOT RESUSCITATE ORDERS
 - A. If the caller identifies the patient has signed a Living Will or is subject to a Do Not Resuscitate order the EMD **MUST** still provide Pre-Arrival Instructions as per protocol. This is to avoid CPR instructions being withheld in the event the caller is in error about the presence of such an order or document.
- 4. REFUSAL BY CALLER TO ACT ON PRE-ARRIVAL INSTRUCTIONS
 - A. It is not the EMD's responsibility to attempt to force callers to participate in actions against that individual's will.
 - B. DO NOT ASK FOR PERMISSION TO GIVE PRE-ARRIVAL INSTRUCTIONS. Do not say "Would you like me to tell you how to do CPR?"
 - C. If the caller refuses to follow PAIs, say "The ambulance is on its way, but this is important to give the patient the best possible chance until it arrives." *Repeat as necessary.*
 - D. If the caller stills refuses to administer aid, ask if there is someone else you can speak to.

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Calltaker Procedures Continued

- E. If no-one else is available attempt to keep the caller on the line and provide emotional support. Make it clear that if they change their mind about providing patient care you will tell them exactly what to do.
- F. Remain polite and courteous at all times.

Calltaker Procedures
Continued

SUBJECT: MEDICAL PRIORITY DISPATCH INCREMENTAL COMPLIANCE POLICY

AMENDED: May 1, 1995

POLICY: It is the policy of the Division of Fire Services Communications Bureau to

comply with the Medical Priority Dispatch System (MPDS) protocols.

PURPOSE: In order to achieve and retain accreditation from NAEMD, all operators shall

maintain the average compliance scores as required by that organization.

PROCEDURE:

It is necessary for each individual EMD to meet the following average MPDS compliance scores in order for the Division of Fire Services to meet the NAEMD Dispatch Center of Excellence Accreditation requirements as follows:

- 1. 95% Case Entry compliance.
- 2. 90% Key Question compliance.
- 3. 90% Post Dispatch Instruction compliance.
- 4. 95% Pre-Arrival Instruction compliance.

Realizing that achievement of these compliance rates is not immediately feasible for newly qualified EMDs, the below listed procedures outline a systematic approach to reach that objective:

- All new operators shall (within six months of hiring) be certified as Emergency Medical Dispatchers (EMD).
- Existing operators shall be subject to this policy as of their EMD certification date.
- 1. Within 2 months of becoming certified EMD's, all operators shall achieve a 50% compliance rate. Any operator not achieving a 50% compliance rate as listed above shall receive five on-line training sessions.

Calltaker Procedures Continued

- 2. Within 3 months of becoming certified EMD's, all operators shall achieve a 70% compliance rate. Any operator not achieving a 65% compliance rate as listed above shall receive five on-line training sessions.
- 3. Within 4 months of becoming certified EMD's, all operators shall achieve a 90% compliance rate. Any operator not achieving a 80% compliance rate as listed above shall receive five on-line training sessions.
- 4. Within 5 months of becoming certified EMD's, all operators shall achieve the NAEMD accreditation compliance rates as identified above. Any operator not achieving these compliance rates shall receive five on-line training sessions.
- 5. After 6 months of becoming certified EMD's, all operators shall maintain the NAEMD compliance rates detailed above. Any operator not maintaining these compliance rates in any one month shall receive five on-line training sessions.
- 6. This policy does not exclude the need for discipline when considering individual cases of gross negligence and/or gross improper behavior, or cases of persistent failure to apply the MPDS protocols correctly; nor does it exclude any other existing disciplinary process.

Discipline vs. Quality Assurance:

- All quality improvement reviews shall be handled by the quality improvement unit.
- When compliance becomes a discipline versus quality improvement problem, the quality improvement unit will identify the individual to the Manager of Communications.
- All on-line remedial training shall be handled by the individual's direct supervisor or an appointed qualified EMD.
- All discipline cases shall be handled according to current disciplinary policy and via the chain of command for the individual concerned.

Calltaker Procedures
Continued

Trigger Points for Disciplinary Action

In the first six months after certification as an EMD:

1. Failure to achieve the required compliance levels as detailed above in two out of three months.

Following a six month period of certification as an EMD:

- 1. Failure to achieve 95% Case Entry compliance in two out of three months.
- 2. Failure to achieve 90% Key Question compliance in two out of three months.
- 3. Failure to achieve 90% Post Dispatch Instruction compliance in two out of three months.
- 4. Failure to achieve 95% Pre-Arrival Instruction compliance in two out of three months.

FIRE COMPANY NOTIFICATION

Notification will be made to the first four (4) due engine companies on the following:

- 1. Sprinkler system in/out of service.
- 2. Fire hydrant in/out of service.
- 3. New set/reset fire hydrant.
- 4. Street obstruction.
- 5. Building hazard.

AUTOMATIC NOTIFICATION OF POLICE DEPARTMENT

Switchboard operators will automatically notify police on the following types of emergency calls:

- 1. Wounding (Shooting or stabbing)
- 2. Fight
- 3. D.O.A. or possible D.O.A.
- 4. Auto accident
- 5. Injured party
- 6. Mental patients
- 7. Violent patients
- 8. Industrial accident
- 9. Miscarriage
- 10. Any call involving a crime
- 11. Overdose
- 12. Nature Unknown

Police notification will be made as soon as possible after receipt of the emergency call.

Switchboard operators will NOT automatically notify police on the following types of emergency unit calls:

Health-related calls, such as:

- 1. Heart patient
- 2. Maternity patient
- 3. Seizure patient
- 4. Stroke patient
- 5. Sick party

When in doubt, notify the police.

NOTIFICATION OF POLICE ON FIRE CALLS. Fire radio operator will notify police anytime a preconnect or greater is laid on a fire. This notification is made for the purpose of having police on the scene for traffic control. Other notifications of police will be made as requested by fire companies or emergency units in the field. <u>Anytime a request is made for the police and a disposition is not given, the radio operator will ask for a disposition.</u>

DISPATCHING TASK FORCES AND STRIKE TEAMS

TASK FORCE



A Task Force is comprised of 2 Engine Companies and 1 Truck Company. A Task Force may be called by an Incident Commander at any time. The Task Force concept is extensively used in the High-Rise plan.

STRIKE TEAM

Engine Strike Team



Truck Strike Team



A Strike Team is comprised of either 3 Engine Companies or 3 Truck Companies. The Incident Commander will specify a Engine Company Strike Team or a Truck Company Strike Team. A Strike Team may be called by an Incident Commander at any time.

DISPATCHING TO A DWELLING FIRE:

The appropriate incident type for a dwelling fire is DW. The response for this incident type is:

- 2 Engine companies
- 1 Truck company
- 1 Battalion Chief

A Division Chief will be dispatched if companies arrive on the scene and layout (does not including pre-connects or supply lines). The Watch Commander will use judgment on dispatching an additional Battalion Chief on a dwelling fire depending on the size of the house. Never dispatch the second Battalion Chief without the Division Chief being dispatch. A Rescue will be dispatched initially, if calls received indicate a working fire, parties trapped etc. inside the I-240 boundaries.

If information is received that an occupant may be inside, the response will include at least one emergency unit. If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm (SOP upgrade included) is requested an emergency Unit will be dispatched also.

If information is received indicating that the dwelling is larger than a normal dwelling, a commercial assignment may be dispatched instead of a dwelling assignment, at the discretion of the Watch Commander.

The procedure for dispatching companies to a dwelling fire is:

EXAMPLE: Vocalarm operator: "Companies stand by" (fire tone is given)... Engines 16-11-T7-B6 respond to [nature of the alarm, report of a house on fire] "931 Philadelphia Street near Young Ave., Engines 16-11-T7-B6 respond to [nature of the alarm, report of a house on fire] "931 Philadelphia Street near Young Ave., 16?...11?

It is acceptable for the vocal alarm operator to precede the address with the nature of the alarm such as "report of a house on fire," "report of smoke coming from the house," etc.

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DISPATCHING TO AN APARTMENT STRUCTURE

FIRES

When a call is received from an individual reporting a fire in an apartment building, the response will always include the number of engines suggested (3 or 4), two truck companies, and one battalion chief. If multiple (more than one) calls are received reporting a fire, the response will include one Division Chief and one additional Battalion Chief. A Rescue will be dispatched initially, if calls received indicate a working fire, parties trapped etc. inside.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief, one additional Battalion Chief and a Rescue will then be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If information is received that an occupant may be inside, the response will include at least one emergency unit. If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm (SOP upgrade included) is requested an emergency Unit will be dispatched also.

AUTOMATIC ALARMS

When an automatic alarm is received for an apartment building, the response will vary, depending on the default incident type for that address as assigned by the CAD system. This means that some addresses will receive a "A1" level response on automatic alarms, while others receive a "A2" level or greater.

When a call is received from an individual reporting that a fire alarm system has been activated in an apartment building, and there is no indication of fire or smoke present, the guidelines for AUTOMATIC ALARMS will be followed.

Anytime a preconnect or greater (includes lines off standpipe) is laid on an apartment building, Fire Communications will make sure that two truck companies, two battalion chiefs, a Rescue and a Division Chief have been dispatched. This includes fire calls that are received as automatic alarms.

Dispatching To An Apartment Fire Continued

RESPONSE

<u>LEVELS</u> <u>FOR FIRE</u>		FOR AUTOMATIC ALARM
A1 A2 A3	3 Engines, 2 Trucks, 1 B/C 4 Engines, 2 Trucks, 1 B/C	3 Engines, 1 Truck, 1 B/C 3 Engines, 2 Trucks, 1 B/C 4 Engines, 2 Trucks, 1 B/C

The "A3" incident type is also used to identify some four-engine response levels not in the "downtown loop district," which do not require a Fire Squad, such as Shelby County Health Care at 1075 Mullins Station Road. "A3" incident type will appear if you allow the CAD system to default when the address is entered.

When dispatching to an apartment fire, the vocal alarm operator will include the APARTMENT NUMBER and NAME OF THE APARTMENTS. The procedure for dispatching companies to an apartment fire is:

EXAMPLE: Vocal operator: "Companies stand by" (fire tone is given)... Engines 33-42-40-T16-T18-B10 respond to [nature of the alarm] the Spring Creek Crossing Apartments, 2011 Fairfall Ave., Apt. 1 near W. Briar Park Drive,. Engines 33-42-40-T16-T18-B10 respond to [nature of the alarm] the Spring Creek Crossing Apartments, 2011 Fairfall Ave., Apt. 1 near W. Briar Park Drive, , ...33? ...42? ...40? ...39?

It is acceptable for the vocal alarm operator to precede the address with the nature of the alarm such as "report of an apartment on fire", etc.

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DISPATCHING TO COMMERCIAL STRUCTURES

FIRES

When a call is received from an individual reporting a fire in a commercial structure, the response will always include the number of engines suggested (3 or 4), two truck companies, and one battalion chief. If multiple (more than one) calls are received reporting a fire, the response will include one Division Chief and one additional Battalion Chief. A Rescue will be dispatched initially, if calls received indicate a working fire, parties trapped etc. inside.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief, one additional Battalion Chief and a Rescue will then be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If information is received that an occupant may be inside, the response will include at least one emergency unit. If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm (SOP upgrade included) is requested an emergency Unit will be dispatched also.

AUTOMATIC ALARMS

When an automatic alarm is received for a commercial structure, the response will vary, depending on the default incident type for that address as assigned by the CAD system. This means that some addresses will receive a "C1" level response on automatic alarms, while others receive a "C2" level or greater.

When a call is received from an individual reporting that a fire alarm system has been activated in a commercial structure, and there is no indication of fire or smoke present, the guidelines for AUTOMATIC ALARMS will be followed.

Dispatching To Commercial Structure Fires Continued

Anytime a preconnect or greater (includes lines off standpipes) is laid on a commercial structure, Fire Communications will make sure that two truck companies, two battalion chiefs, a Rescue and a Division Chief have been dispatched. This includes fire calls that are received as automatic alarms.

RESPONSE

LEVELS FOR FIRE

FOR AUTOMATIC ALARM

C1	-	3 ENGINES, 1 TRUCK, 1 B/C
C2	3 ENGINES, 2 TRUCKS, 1 B/C	3 ENGINES, 2 TRUCKS, 1 B/C
C3	4 ENGINES, 2 TRUCKS, 1 B/C	4 ENGINES, 2 TRUCKS, 1 B/C

When dispatching to a commercial fire (or alarm), the vocal alarm operator will include the name of the occupancy and the location of the fire or alarm within the occupancy. The procedure for dispatching is:

EXAMPLE: Vocal Operator: "Companies stand by" (fire tone is given) ..., Engines 24-51-17-T10-T8-B5 respond to a report of fire at the Mapco Express Store, 5325 Summer Ave. at the Wolf River., Engines 24-51-17-T10-T8-B5 respond to a report of fire at the Mapco Express Store, 5325 Summer Ave. at the Wolf River., 24?...51?...17?

EXAMPLE: Vocal Operator: "Companies stand by" (fire tone is given) ... Engines 23 - 19-17-T8-T6-FS6-B5 respond to an Automatic Alarm, Q & O Chemical, covering the lab, 3324 Chelsea Ave. at Holmes Street, ... Engines 23-19-17-T8-T6-FS6-B5 respond to an Automatic Alarm, Q & O Chemical, covering the lab, 3324 Chelsea Ave. at Holmes Street., 19?...17?...28?...13?

It is acceptable for the vocal alarm operator to precede the address with the nature of the alarm such as "report of a building on fire", etc.

DISPATCHING TO A SCHOOL STRUCTURE.

FIRES

When a call is received from an individual reporting a fire in a school, the response will always include three engines, two truck companies, and one battalion chief. If multiple (more than one) calls are received reporting a fire, the response will include one Division Chief and one additional Battalion Chief. A Rescue will be dispatched on calls received which indicate a working fire, parties trapped etc.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief, one additional Battalion Chief and a Rescue will then be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If information is received that an occupant may be inside, the response will include at least one emergency unit. If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm (SOP upgrade included) is requested an emergency Unit will be dispatched also.

AUTOMATIC ALARMS

On AUTOMATIC ALARMS the second truck company may be held at the discretion of the Watch Commander.

Anytime a preconnect or greater is laid on a commercial structure, Fire Communications will make sure that two truck companies, two battalion chiefs, and a Division Chief have been dispatched. This includes fire calls that are received as automatic alarms.

RESPONSE

<u>LEVELS</u> <u>FOR FIRE</u> <u>FOR AUTOMATIC ALARM</u>

SC 3 Engines, 2 Trucks, 1 B/C 3 Engines, 2 Trucks, 1 B/C

Dispatching To A School Fire Continued

When dispatching to a school fire or automatic alarm, the vocal alarm operator will include the name of the school and the location of the fire or alarm within the school. The procedure for dispatching to a school is:

EXAMPLE: Vocal operator: "Companies stand by" (fire tone is given) Engines 47-48-46-T23-T22-B11 respond to Craigmont School, report of a fire in the kitchen area, first floor, 3333 Covington Pike at Craigmont Ave., Engines 47-48-46-T23-T22-B11 respond to Craigmont School, report of a fire in the kitchen area, first floor, 3333 Covington Pike at Craigmont Ave., 47?.. 48?.. 46?

It is acceptable for the vocal alarm operator to precede the address with the nature of the alarm such as "report of a school on fire" etc.

DISPATCHING TO A HOSPITAL STRUCTURE

1. ACTUAL FIRE CONDITIONS

If a call is received from an individual reporting actual fire conditions (fire, smoke, or odor of smoke) in a hospital, the incident type is HOF. This includes fires that are reported to be already out. The response for this incident type is:

- 4 Engine companies
- 2 Truck companies
- 1 Battalion Chief

If multiple calls (more than one) are received reporting a fire, the response will include one Division Chief, one additional Battalion Chief and a Fire Squad.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief, one additional Battalion Chief and a Rescue will then be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If information is received that injuries are involved, the response will include at least one emergency unit. If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm is requested (SOP upgrade included) an emergency Unit will be dispatched also.

The procedure for dispatching to this type of alarm is:

EXAMPLE: Vocal Operator: "Companies stand by"...(fire tone is given)... Engines 7-5-8-1-T13-T4-B4 respond to the Baptist Hospital, report of fire in the laundry room, first floor, 899 Madison Ave. at Dudley Street, Engines 7-5-8-1-T13-T4-B4 respond to the Baptist Hospital, report of fire in the laundry room, first floor, 899 Madison Ave. at Dudley Street, 7?...5?...8?...1?...11?

Dispatching To A Hospital Fire Continued

2. AUTOMATIC ALARMS

If a call is received reporting an activated alarm system in a hospital, with no report of actual fire conditions, the incident type is HO. The response for this incident type is:

- 2 Engine companies
- 1 Truck company
- 1 Battalion Chief

When companies arrive and report any sign of fire, the rest of the hospital assignment (HOF) will be dispatched including, the Division Chief and one additional Battalion Chief.

EXAMPLE: Vocal Operator: "Companies stand by"...(fire tone is given)... Engines 7-9-T13-B4 respond to an Automatic Alarm, Baptist Hospital, 19 Madison East, 899 Madison Ave. at Dudley Street,)... Engines 7-5-T13-B4 respond to an Automatic Alarm, Baptist Hospital, 19 Madison East, 899 Madison Ave. at Dudley Street, 7?...5?

Incident type HODC carries the same response as HO.

DISPATCHING TO A NURSING HOME STRUCTURE

The incident type for a nursing home is NH. The response is:

- 3 Engine companies
- 2 Truck companies
- 1 Battalion Chief

If multiple calls (more than one) are received, the response will include one Division Chief and an additional Battalion Chief. A Division Chief will be dispatched if a pre-connect or greater is used. A Rescue will be dispatched on calls received which indicate a working fire, parties trapped etc.

If information is received that there is an actual fire, the response will include one or more emergency units, at the discretion of the Watch Commander.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief, one additional Battalion Chief and a Rescue will then be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm (SOP upgrade included) is requested an emergency Unit will be dispatched also.

When dispatching to a nursing home fire or automatic alarm, the vocal alarm operator will include the name of the nursing home and the location within the nursing home that the fire department is needed. The procedure for dispatching to a nursing home is:

EXAMPLE: Vocal operator: Companies stand by. (fire tone is given)... Engines 17-13-11-T8-T4-B5 respond to the Rosewood Manor Nursing Home, report of a fire in the basement, 3030 Walnut Grove Road at Hayden Street.,)... Engines 17-13-11-T8-T4-B5 respond to the Rosewood Manor Nursing Home, report of a fire in the basement, 3030 Walnut Grove Road at Hayden Street ,. 17?... 13?... 11?

DISPATCHING TO A HIGH-RISE STRUCTURE

The incident type for a high-rise is HR. The response is:

- 4 Engine companies
- 2 Truck companies
- 2 Battalion Chiefs

<u>Approved</u> hospitals, jails, and other facilities with security staff on duty shall receive (2) Engine Companies, (1) Truck Company, and (1) Battalion Chief for automatic fire alarms unless telephone calls indicate actual smoke, or other fire related emergency.

PLEASE SEE THE HIGH-RISE PLAN UNDER THE "EMERGENCY OPERATIONS PROCEDURES" section in the Operations Manual.

If information is received there is an actual fire, the response will include one or more emergency units, at the discretion of the Watch Commander.

If only one call is received and companies arrive and lay a preconnect or greater (includes lines off standpipes) on the fire, the Division Chief will be dispatched.

Dispatch the nearest large diameter hose (LDH) Hose Tender when multiple lines are laid. If a second alarm is called for, or an SOP second alarm is reached, dispatch an additional (LDH) Hose Tender. When a fire company is dispatched to man hose tender 1 or 2, that company will not be assigned to the incident; it will be placed out of service and only the hose tender(s) will be assigned. On Second Alarm Fires, automatically dispatch High Pressure 1. Also, on all Second Alarm Fires, including SOP Second Alarm Fires make sure that a PLATFORM Truck has been included in the first or second alarm assignment.

If two or more lines (pre-connect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene.

When dispatching to a High-Rise fire or automatic alarm, the vocal alarm operator will include the name of the high-rise and the location within the high-rise that the fire department is needed.

High-Rise Plan Continued

The follow is a portion of the High-Rise plan that is contained in the Operations Manual.

PURPOSE: To clarify and define standard operational practices that are essential for successful extinguishment of high rise fires.

High Rise Building Definition - A high-rise building is one that is equal to or greater than six stories in height. The usual characteristics of such a building are:

- 1. Portions are beyond the reach of fire department aerial equipment.
- 2. A potential exists for a significant increase of air flow (stack effect) or a reverse air flow effect (reverse stack effect). Also, there is a possibility of stratification of smoke.
- 3. An unreasonable evacuation time may be expected.
- 4. A greater dependency on internal fire protection systems will be required.

RESPONSIBILITY: It is the personal responsibility of all Fire Service Personnel to learn the basic procedures and assignments that will be used during high rise fires. Company Commanders, Battalion Chiefs, Division Chiefs and the Chief of Operations are responsible to enforce standard drill procedures which are authorized as a basis of operation for all companies and maintain a high degree of proficiency for all personnel.

COMMAND PROCEDURES: The fundamental approach to be utilized in a high-rise fire encompasses the use of task forces. A task force is a combination of resources (2 Engines, 1 Truck), with common communications and a leader assembled together for a specific mission (Fire Attack, Rescue, Ventilation, etc.). The task force concept improves accountability and provides sufficient personnel and equipment for meeting the complex demands of a high rise fire.

High-Rise Plan Continued

COMMUNICATIONS: It is the responsibility of the command officer, and/or task force leader to always maintain accountability and communications with subordinate personnel assigned within an area of responsibility. Later arriving command officers assigned to manage multi-company resources, or direct operations within a specific area (Sector 12, Staging, etc.) are required to identify their command presence and location to any subordinate company officer, task force leader, or previously assigned subordinate command officer within that designated area of responsibility.

STANDARD RESPONSE: The standard response for all high-rise buildings within the City of Memphis shall be (4) Engine Companies, (2) Truck Companies, and (2) Battalion Chiefs. Approved hospitals, jails, and other facilities with security staff on duty shall receive (2) Engine Companies, (1) Truck Company, and (1) Battalion Chiefs for automatic fire alarms unless telephone calls indicate actual smoke, or other fire related emergency.

ACCOUNTABILITY: Second (2nd) Alarm and greater alarm responding personnel MUST report into the incident area as follows: Command Officers (B/C and above)- shall report to the Command Post, if established. All other company personnel, EMS units, fire apparatus and equipment must report on scene through Base unless otherwise directed or modified in the high-rise plan. NOTE: ONCE ARRIVING ON THE SCENE, ALL PERSONNEL DEPLOYED AND/OR ASSIGNED TO INTERNAL AREAS OF HIGH-RISE OPERATIONS, SHALL REPORT INITIALLY TO THE LOBBY CONTROL OFFICER FOR ACCOUNTABILITY PURPOSES. CHECK-IN PROCEDURES MUST BE COMPLETED BEFORE DEPLOYING TO UPPER FLOORS.

January 5, 2000

High-Rise Plan Continued

HIGH-RISE OPERATIONAL PLAN:

1st Alarm Assignment			
Company Designation	TASK		
1st Engine	Form Investigative Team / Driver on 1st Engine establishes		
1st Truck	Lobby Control		
2nd Engine	Form Task Force #1 and		
3rd Engine	Establish Staging Area and		
2nd Truck	Assign Assistant to Operations Chief		
1st Battalion Chief	Operations Chief		
2nd Battalion Chief	Sector Supervisor		
4th Engine	Establish Base location / Assume Lobby Control		

2nd Alarm Assignment			
5th Engine	Form Task Force #2		
6th Engine			
3rd Truck			
7th Engine	Task Force #3		
8th Engine			
4th Truck			
1st Division Chief	Establish Command Post		
2nd Division Chief	Operations Chief		
3rd Battalion Chief	Report To Command Post, & Deploy To Staging		
4th Battalion Chief	Report To Command Post		
5th Battalion Chief	Report To Command Post		
Rescue	Rapid Intervention Team (Report To Operations Chief)		
1st Emergency Unit	Setup Rehab		
2nd Emergency Unit	Report to Base		
3rd Emergency Unit			
EMS Supervisor	Medical Group Supervisor (Report To Operations Chief)		

High-Rise Plan Continued

PHASE 1: INVESTIGATIVE MODE

ACTIONS: NO VISIBLE FIRE / NO SUSPECTED FIRE

The first (1st) Engine Company arriving on the scene shall enter the building with essential equipment and initiate fire investigation. The Company shall determine appropriate location of suspected fire, and travel to the suspected fire area utilizing the safest route available. The first (1st) Truck Company arriving on the scene shall deploy with the (1st) Engine Company for the purpose of conducting a preliminary fire investigation. Any investigative team shall always consist of one engine and one truck company. At no time shall any company take an elevator closer than two floors below the reported fire area for investigative purposes.

The Driver on the 1st Engine Company to arrive on the scene shall serve in the lobby area and shall be designated "Lobby Control".

The investigative team shall determine and initiate the appropriate measures upon reaching the suspected fire area. Following a thorough investigation of the suspected fire area, the investigative team leader may disregard other responding companies (provided command has not been transferred to a superior officer), should no indication of fire exist within the building.

Note: Under no circumstances shall disregard orders be issued until the fire floor has been surveyed by fire personnel.

Later arriving first alarm company personnel, including the 1st and 2nd Battalion Chiefs to arrive on the scene, shall automatically deploy to the Lobby area with full protective clothing, SCBA's, PASS devices, and essential equipment unless otherwise disregarded by the investigative team. Each company member shall bring one (1) extra air bottle. Engine Drivers on the 2nd and 3rd arriving engine companies shall remain with apparatus and setup for standpipe/sprinkler operations.

The (2nd) and (3rd) arriving Engine Companies, and (2nd) Truck Company reporting on scene shall deploy to lobby area, and combine in a standby Task Force, (2 Engine Companies & 1 Truck Company). The designated Task Force leader shall be the first arriving company officer (actual - non out-of-rank if available) to report to the lobby area.

January 5, 2000

High-Rise Plan Continued

The 4th Engine Company (1st Alarm) reporting on the scene of any high-rise building shall survey the area, determine, and transmit an appropriate Base location on talkgroup "FIRE1" and (appropriate Fire Ground Talkgroup the incident is being worked on). The Engine Driver shall be designated "Base Manager" and shall remain with the apparatus. Company personnel from the (4th) Engine Company shall deploy to the Lobby area from a Base location. The company officer shall assume the responsibility for lobby control from the driver of the (1st) Engine Company and the Driver shall remain with the 4th Engine Company. (Duties - elevator control, HVAC control, fire control room, and to secure and identify the correct stairwell to be used if stairwell support is implemented.).

The first arriving Battalion Chief shall contact the investigative team, determine incident status, and will assume command. Upon transfer of command, the investigative team shall be designated "ATTACK FORCE #1".

Radio Communication Example: Command, this is Battalion 4, "What is your Status". Battalion 4, this is Command, "We are still investigating the area, we have a slight smell of smoke, but no indication of fire".

"Command, this is Battalion 4, I received your message, be advised that I now have Command, you are designated **Attack Force #1**, also be advised that a task force is standing by in the lobby".

ACTIONS: WORKING FIRE CONDITIONS:

NOTE: Should at any point during high-rise operations a determination is made regarding the existence of an actual working fire, a "Working Fire, 2nd Alarm" shall be declared and transmitted by the Incident Commander to Fire Dispatch. A "Working Fire" in a high-rise building should be based upon the actions of the investigative team regarding the use of a standpipe system, indicating significant rescue problem, or reporting a significant amount of smoke in the fire area.

Following the transfer of command to a Battalion Chief, or higher ranking fire officer, the investigative team shall continue operations as "Attack Force #1".

The "Attack Force #1" Leader must report by radio to the standby task force and/or command officer(s) in lobby that a working fire exists. The "Attack Force #1" Leader must also identify the strategic assignment and mandate the deployment function of the Task Force standing by in the lobby (e.g., Attack Force 2, Rescue Force 1, Vent Force 1, etc.).

High-Rise Plan Continued

NOTE: SHOULD "ATTACK FORCE #1" COMMIT TO STANDPIPE OPERATIONS, THE TASK FORCE IN THE LOBBY MUST BE DEPLOYED TO ASSIST THE OPERATIONS OF "ATTACK FORCE #1". THE STANDBY TASK FORCE IN THE LOBBY SHALL BE DESIGNATED "ATTACK FORCE #2".

EXCEPTION: "ATTACK FORCE #1" MAY ASSIGN THE STANDBY TASK FORCE TO "RESCUE FORCE #1, VENT FORCE #1, OR OTHER INCIDENT PRIORITIES" PROVIDED THE MEMBERS OF "ATTACK FORCE #1" ARE ABLE TO CONTROL THE FIRE WITH (1) AIR BOTTLE OR LESS. AGAIN, SHOULD THE ATTACK FORCE #1 TEAM LEADER NOT BE ABLE TO DETERMINE THE ACTUAL AIR SUPPLY NEEDED TO CONTROL THE FIRE, THE STANDBY TASK FORCE IN LOBBY MUST DEPLOY TO ASSIST WITH THE INITIAL STANDPIPE OPERATION.

The drivers on the 2nd and 3rd Engine Companies (1st Alarm) shall initiate standpipe/sprinkler pumping operations, regardless of wet/dry systems once a "working fire" has been declared.

Upon receiving the deployment orders from "attack force #1", the assembled Task force and Battalion Chief in the lobby shall proceed by the safest available means to a staging area at least - (2) floors below the fire.

Once the staging area is established, the task force leader shall assign (1) individual to the staging manager position and assign (1) individual to assist the Battalion Chief in the Operations Area. The task force shall immediately proceed from staging to the area of assigned operations. NOTE: DESIGNATED RADIO COMMUNICATIONS OF THE TASK FORCE SHALL REFLECT ASSIGNED FUNCTION, (I.E., ATTACK FORCE #2, RESCUE FORCE 1, ETC.).

The (1st) Battalion Chief on the scene shall deploy with the task force to the staging area. The Commander shall automatically deploy from the staging area staffed with one assistant (with radio), and report to an operations area one (1) floor below the fire for the purpose of commanding the overall tactical operations. The Assistant shall monitor the radio talkgroup "FIRE1" and the Commander shall monitor the tactical fireground talkgroup "GRD" the incident is being worked on.

High-Rise Plan Continued

The (2nd) Battalion Chief on the scene shall deploy from the lobby area to the staging location. Once "Command/Operations" have been established below the fire area, the (2nd) Battalion Chief shall automatically be assigned to the fire floor. The (2nd) Battalion Chief shall be designated the Sector Supervisor in charge of tactical operations on the fire floor.

Responding Battalion Chiefs arriving on the scene for greater alarms, or special call, shall deploy to the Staging area below the fire. Responding Battalion Chiefs, however, shall report to the command post initially, and automatically proceed through Lobby Control to the Staging area unless otherwise directed. Battalion Chiefs must notify Command/Operations Chief of availability for deployment once in Staging.

ACTIONS: FIRE DISPATCH OPERATIONS

Upon notification of a "Working Fire, 2nd Alarm", the fire dispatch office shall dispatch the following Fire & EMS Units to the designated Base location. Responding Command Officers shall report to the Command Post.

- 2 Task Forces (4 Engines, 2 Trucks)
- 3 Battalion Chiefs
- 1 Rescue
- 2 Division Chiefs
- 3 Emergency Units
- 1 Emergency Medical Supervisor

Specialized Response:

Fire-Com 1 Air Truck

High-Rise Plan Continued

ACTIONS: ESTABLISHING BASE

The Engine Company Driver of the 4th Engine, 1st Alarm assignment shall be the BASE MANAGER throughout the incident.

Upon arrival of fire companies, the Base Manager shall assemble responding companies into a task force and automatically send one Task Force, through Lobby Control, to the staging area. The Task Force shall carry all necessary equipment including extra air bottles. The remaining Task Force shall remain in BASE and standby for orders to deploy.

The Base Manager shall inform Command regarding the deployment of any task force from the base location to the staging area. Also, the Base Manager shall inform Command of the number of available "Task Forces" at Base. Command will notify Fire Dispatch should additional resources be necessary.

NOTE: THE BASE MANAGER SHALL ALWAYS HAVE AT LEAST (1) ONE TASK FORCE STANDING BY AT THE BASE LOCATION. SHOULD NO TASK FORCES BE AVAILABLE IN BASE AT ANY POINT, COMMAND MUST BE NOTIFIED. COMMAND IS REQUIRED TO SOUND THE NEXT HIGHER ALARM, (3RD ALARM, 4TH ALARM, ETC.) UPON NOTIFICATION OF NO AVAILABLE TASK FORCES IN BASE UNLESS THE FIRE IS UNDER CONTROL. THE STRATEGY OF HIGH-RISE OPERATIONS IS TO MAINTAIN A MINIMUM OF (1) TASK FORCE IN STAGING, AND (1) TASK FORCE IN BASE AVAILABLE FOR DEPLOYMENT.

ACTIONS: MANAGING STAGING

Once established, staging shall always maintain at least one Task Force in Staging (actually in staging or in-route to staging), ready for deployment.

Should an additional Task Force be required in Staging, the Staging Manager shall notify BASE and request another Task Force.

NOTE: The Operations Chief is responsible for determining the appropriate number of task forces in staging should the demand exceed the minimum requirements outlined in the high-rise plan.

January 5, 2000

High-Rise Plan Continued

ACTIONS: COMMAND

The (1st) Division Chief on the scene shall contact Command/Operations and request a status report. The Division Chief shall assume Command of the Incident, establish command post, and establish the position of "Operations" with the first Battalion Chief.

Command shall announce, via radio, to all companies on the scene that Operations has been established. The Command Post shall assign (1) Battalion Chief responding on a greater alarm, or special call, to the Command Post for the purpose of assisting with radio communications and incident documentation.

The (2nd) Division Chief arriving on the scene shall report to the Command Post for incident briefing. The Division Chief shall then proceed through Lobby Control and Staging to the Operations Area. The (2nd) Division Chief will assume the position of "Operations", unless otherwise directed.

ACTIONS: SAFETY TEAM (RAPID INTERVENTION TEAM)

The Rescue arriving on the 2nd alarm, or special call, shall automatically deploy through lobby to the staging area. Rescue personnel shall automatically proceed from the staging area and report to the Operations Officer. Rescue personnel shall standby in Operations Area for the purpose of providing "Rapid Intervention" in the event of a reported trapped fire fighter, fire company, or other personnel operating in the fire area. The (RIT Team) shall carry the necessary rescue equipment to the operations area and report directly to the Operations Chief.

ACTION: ESTABLISHING MEDICAL SECTOR/BASE

The (1st) EMS Unit shall report directly to the scene, take all necessary equipment, proceed through LOBBY CONTROL, through STAGING, and establish REHAB one floor below STAGING. Radio talkgroup "GRD" that the incident is being worked on will be utilized initially until advised otherwise.

The 2nd, 3rd, and later arriving EMS Units shall respond to BASE and establish a parking pattern which will assure prompt movement out of BASE. The parking area should be separated from fire apparatus.

High-Rise Plan Continued

Note: Any EMS personnel deploying inside the fire building shall obtain the necessary breathing apparatus and a PASS device from the air truck or a fire fighting company.

The EMS Supervisor shall ensure the above mentioned functions are established. The EMS Supervisor will report to the Command Post, then proceed through Lobby Control and Staging to the Operations area and assume the position of MEDICAL GROUP Supervisor. The MEDICAL GROUP Supervisor shall remain in close proximity to the Operations Chief. When the MEDICAL GROUP is established, the EMS Supervisor (Medical Group Supervisor) will advise EMS personnel and all EMS radios will switch to radio talkgroup (D5) "EMGRD". Medical Functions shall remain on (D5) "EMGRD" during the remainder of the incident.

ACTION: 3RD ALARM AND GREATER

Greater alarms beyond the 2nd alarm shall comprise the following:

- 2 Task Forces
- 2 Battalion Chiefs

The Incident Commander will call for specialized apparatus and equipment, as needed.

ACTION: STAFF PERSONNEL ASSIGNMENTS

Note: Staff personnel responding on greater alarms shall report to the Command Post prior to pre-assigned deployment area for incident briefing.

- 1. Director and/or Deputy Director will assume Command upon arrival on the scene. The following personnel shall report directly to Command.
 - A. Chief of EMS
 - B. Chief Fire Marshal
 - C. Administrative Battalion Chief (PIO / Liaison Officer)
 - D. Safety Officer
- 2. Chief of Emergency Operations will assume Operations.

High-Rise Plan Continued

- 3. Chief of Administration will assume Planning. The following personnel and/or equipment will report to the Planning Officer upon arrival on the scene:
 - A. Chief of Training
 - B. Strategic Planning Chief
 - C. Command Van
 - D. Fire Protection System Inspector
- 4. Chief of Staff will assume Logistics. The following personnel and/or equipment will report to the Logistics Officer upon arrival on the scene:
 - A. Chief of Apparatus Maintenance
 - B. Manager of Logistical Services
 - C. Chief of Fire Communications

Working Fire: A "Working Fire, 2nd Alarm" shall be declared and transmitted by the

Incident Commander to Fire Dispatch. A "Working Fire" in a high-rise building should be based upon the actions of the investigative team regarding the use of a standpipe system, indicating significant rescue problem, or

reporting a significant amount of smoke in the fire area.

KEY ASSIGNMENTS / High-Rise Building

Base: Driver from 4th. Engine Company

HVAC: Heating, Ventilation and Air Conditioning (4th Engine Company)

Command Post: 1st Division Chief

Lobby Control: 1st Engine Driver, 4th Engine Officer

Medical Sector: EMS Supervisor
Operations: 1st Battalion Chief
Rehab: 1st Emergency Unit

Staging: Member from Task Force #1

Stairwell Support: Logistics Section Chief or the Incident Commander

High Rise Plan Continued

ELEVATOR POLICY

During fire situations elevators present an extreme danger to fire service personnel due to the erratic behavior caused by fire, smoke and water during firefighting operations. It is important that all personnel know how elevators work and have an understanding of what malfunctions may occur.

The following shall serve as guidance for all fire service personnel operating in buildings with elevator service.

Note: Fire Service functions must always be utilized provided the elevator is so equipped.

- 1. Personnel deploying in elevator cars shall wear full protective equipment, carry forcible entry tools, means of communications and a fire extinguisher (pumpcan).
- 2. In buildings where a working fire is known, or has been declared, elevators will not be used unless housed in an area separate from the involved section of the building. Separate elevator banks may be utilized if they do not service the fire floor.
- 3. All elevator cars must be recalled and put under fire service control by initial arriving companies. Fire Service control must be maintained throughout the incident.

Note: The decision to use elevators should be based on assurances that the designated elevator landing area is safe. All personnel must exit at least two floors below the fire floor area during fire investigations. Again, once fire conditions are known, elevators shall not be utilized unless the conditions outlined in #1 and #2 above are met.

High Rise Plan Continued

APPENDIX

LOBBY CONTROL

The Lobby Control Officer reports to the Logistics Section Chief or the Incident Commander, if the Logistics position has not been established. The responsibilities for Lobby Control at a high-rise incident are extensive. Lobby Control should be a priority like Staging and it is recommended that it be established on all working high-rise incidents from the first alarm assignment.

The Lobby Control Officer shall report to Logistics/Incident Commander the number of floors (based on elevator floor indicators) in the building and whether the elevators have been recalled. This is valuable information for the Incident Commander because of the possibility that people may be trapped in elevators.

Functions of "Lobby Control"

The following minimum requirements need to be addressed by the Lobby Control Officer:

Control of fire department personnel and civilians entering and exiting the building. It is very important to direct incoming resources to the correct stairwell when they are ascending to upper floors or Staging.

Account for all personnel entering or exiting the building by maintaining records, in and out by times, and destination.

When the elevators are determined to be safe, the Lobby Control Officer shall designate specific elevators to be used.

Lobby control will assign a fire department elevator operator. Any car not equipped with fire fighter service should be utilized with extreme caution.

Shut down the HVAC system to reduce smoke and heat movement within the building unless an on-scene building engineer can isolate the HVAC for smoke removal.

Verify that the water supply into building standpipe system has been completed.

High Rise Plan Continued

When directing companies to upper floors, make sure that they are carrying additional equipment.

Use the fire control room for public address system, HVAC control, fire alarm information, sound powered phones, and relay of pertinent building information to I.C. (Note: Use the building engineer when available for building information.)

The following are additional considerations for Lobby Control:

Use building communications system to address occupants.

Pressurize the stairwells with fans when the building HVAC can't be used.

Confirm the building height as identified by elevator floor indicators.

Determine occupant egress to ensure a safe corridor for exiting people (consider the use of police officers to control civilians evacuated from the building). Direct personnel to move occupants a minimum of 200 feet away from the building.

STAIRWELL SUPPORT

If established, Stairwell Support reports to the Logistics Section Chief or the Incident Commander, if the Logistics position has not been established. The Stairwell Support function is implemented when equipment cannot be moved to Staging by elevators or an additional water supply is needed. This operation can consume a large number of personnel, not only for the initial set up, but also for relief personnel.

The responsibility of Stairwell Support is the priority transportation of equipment by way of a stairwell to the staging floor. If equipment is delivered to the roof by helicopter, Stairwell Support will handle equipment movement down the stairwell to Staging. If an auxiliary water supply is required by way of the stairwell, the officer in charge of Stairwell Support will coordinate and supervise this effort. Under this situation a request should be made for "Base" to provide a water supply line to the stairwell entrance.

High Rise Plan Continued

Strategy for Stairwell Support

Determine the number of personnel necessary to accomplish the task. Consider one person per two floors and one officer per four or five personnel. Consider use of task force.

If available, provide a separate radio channel for Stairwell Support.

Officers must remain mobile to supervise the operation. Stairwell Support is very demanding work and officers must ensure a smooth flow of equipment at a pace that can be sustained.

Officers must monitor their personnel for signs of undue fatigue or distress. If it is to be an extended operation, arrange for timely relief and consider assigning two person teams alternating with one carrying and one resting.

Lobby Control or Base will deliver equipment to the stairwell entrance at ground level.

Tactics For Stairwell Support

Normally, one person picks equipment up at the ground floor entrance to the stairwell and carries it to the third floor landing. That person then returns to the ground floor for another load. The person at the third floor carries the equipment to the fifth floor landing and then returns to the third floor for another load. This process continues until the equipment is delivered to the staging floor hallway. Moving equipment beyond that point is the responsibility of the Staging Area Manager.

If the route involves unusual problems, long or crossover hallways, scissor stairwells, etc., supervising officers will adjust assignments.

Stairwell Support personnel shall have their personal safety equipment, turnouts, helmets, breathing apparatus, and flashlights available to them in the stairwell. In addition, officers will have their portable radios and, when available, building sound powered phones.

STAIRWELL SUPPORT SHALL INITIATE POSITIVE PRESSURE VENTILATION IN STAIRWELL, AND MAINTAIN A SMOKE FREE ENVIRONMENT FOR COMPANY OPERATIONS, RESCUE EFFORTS AND CIVILIAN EVACUATIONS.

High Rise Plan Continued

GENERAL POLICY

- A. All companies when responding to a high rise structure shall respond according to the High-Rise Plan For Operations & Response To High Rise Buildings. Once established, BASE shall be the point to which companies respond.
- B. ALL personnel who leave their apparatus and proceed into the building shall wear full protective clothing, including turnout coat, turnout pants, helmet, gloves, protective hood, and SCBA with pass device attached (pass device shall be in the on position).
- C. No personnel, regardless of rank shall proceed into or out of the Operations area without reporting to Lobby Control.
- D. Engine companies shall enter the structure with the following equipment: Hotel Pack (3 sections of 1 3/4 hose, 1 nozzle, 1 adapter, Elevator Keys including MEDECO Key), Building Keys, 2 portable radios, 1 hand light or flashlight, and 1 pump can or hand held portable fire extinguisher, or as otherwise directed.
- E. Truck companies shall enter the structure with 2 portable radios, hand extension ladder, 1 pick headed axes, 1 pike poles, k-tool kit (with pro bar), 1 PPV fan, life line bag (1) with harness bag, 1 hand light or flash light for each member, or as otherwise directed.
- F. Any member deployed to the staging shall carry 1 extra air bottle to that location.
- G. Task Force Leaders must maintain strict accountability of members working in their group and set up a work rotation that allows members to work fifteen minutes, rest fifteen minutes and return to work with fresh air bottles. After two work cycles the Task Force team will report to rehab for rest, fluids, and a medical check for thirty minutes, then return to the incident area for re-deployment.
- H. The STAGING AREA (radio call "STAGING") will be establish at all high rise working fire incidents. The Staging AREA shall be located (2) floors below the fire (unless altered as needed) and shall be the primary entry point for all working fire personnel prior to entering the fire area. Equipment and air bottles shall be transported and stored at the staging area unless designated to be stored at another location.

High Rise Plan Continued

- I. BASE is an area where apparatus is parked at a high rise incident, that serves as a distribution area for all company personnel and equipment after they arrive at the fire scene. The BASE Manager's radio designation shall be "BASE". The base Manager shall be responsible for organizing the parking area for all apparatus. The BASE Manger shall assure that fire fighting and EMS apparatus are separated and assure that adequate entry and exit access is maintained for EMS apparatus.
- J. During high-rise operations, responding personnel will leave their apparatus at Base unless ordered otherwise.
- K. The location of OPERATIONS shall be 1-floor below the fire unless designated otherwise by the OPERATIONS CHIEF. The OPERATIONS CHIEF should locate the command area so as to effectively determine command needs. OPERATIONS must continually maintain a written OPERATIONS work sheet showing the location of all Task forces and their members.
- L. The REHABILITATION AREA shall be located 1 floor below the STAGING AREA. This area shall coordinate the rest, rehabilitation, medical care of individuals and personnel involved in the incident. Foods and Fluids will be transported to this area.
- M. The AIR Truck shall respond to The BASE location, and then proceed to a position located near the entrance of the building, and confirm its location to the INCIDENT COMMANDER. Precaution and safety must be used to determine the position of the Air Truck due to the possibility of falling debris.
- N. Any High Rise incident believed to cause severe mental stress shall be followed by critical stress debriefing.
- O. Maintaining Standpipe Operations Drivers will be solely responsible for laying out hose, connecting hose, and pumping to standpipe and sprinkler systems during high-rise operations. Unless ordered otherwise, drivers will lay hose and pump water when an operations is confirmed (A WORKING FIRE). After hose lines are charged and proper pumping pressures obtained, DRIVERS, who are located in pumping positions which may be endangered by fallen glass and debris, shall secure salvage covers from aerial trucks and cover their hose lines. The covers should be at least tripled folded to provide protection.

Note: Drivers should not endanger their own safety to carry out this procedure.

DISPATCHING TO A HAZARDOUS MATERIALS INCIDENT.

Incident types and response levels for hazardous materials incidents are as follows. Remember these are "incident types" associated only with the CAD system in communications. Firefighting personnel are not familiar with incident type codes so communications personnel should refrain from referencing them during radio transmissions etc.

H1 - Normal hazardous materials incidents, which are known to <u>not involve</u> large quantities of flammable liquids.

RESPONSE: 1 Engine company

1 Rescue

1 Battalion Chief1 Division Chief, plus

1 Haz-Mat Battalion Chief

H2 - Hazardous materials incidents, involving large quantities of flammable liquids or situations <u>that could possibly</u> involve large quantities of flammable liquids, in an accident, spill, or on fire. (*Example: A Gasoline / Diesel tanker truck*)

RESPONSE: 3 Engine companies

2 Truck companies

1 Fire Squad

Light Water 1 & 2 Task Force

Battalion Chief
 Division Chief, plus
 Haz-Mat Battalion Chief

Engine 20, (if out of service Engine 10) (Large diameter hose)

If the hazardous materials incident is in the Haz-Mat Battalion Chiefs Battalion, it is not necessary to dispatch an additional Battalion Chief.

The Lightwater Task Force is comprised of Lightwater 1, Lightwater 2 and engine 20. If engine 20 is out of service, engine 10. When engine 20 or 10 is dispatched as part of the Lightwater Task Force they will not be assigned to the incident; they will be placed out of service in the CAD system and only Lightwater 1 and 2 will be assigned.

If Engine 20 is included in the first alarm assignment, compensate for Engine 20 being part of the Lightwater Task Force by including an additional Engine in the first alarm response.

Dispatching To A Hazardous Materials Incident Continued

If information is received that an injury or illness is involved, the response will include one or more emergency units, at the discretion of the Watch Commander. If two or more lines (preconnect or greater) are laid, an Emergency Unit will be dispatched to standby at the fire scene. If a multiple alarm is requested (SOP upgrade included) an emergency Unit will be dispatched also.

If the situation warrants, or if Light Water 1 Task Force is dispatched, notify the Chief of Training.

This SOP does not prevent a firefighting company Officer from requesting additional companies if in their judgment the situation dispatched on, may require additional firefighting companies/manpower etc..

When dispatching to a hazardous materials incident, the vocal alarm operator will include the following:

- 1. Name of occupancy and exact location of incident
- 2. Name and quantity of the substance involved
- 3. Any other known information that is pertinent
- 4. Temperature, wind speed and direction, if known at the time of dispatch

The procedure for dispatching to a hazardous materials incident is:

EXAMPLE: Vocal Operator: Companies stand by (fire tone is given) ..., Engine 23-FS6-B5-D2 respond to a hazardous materials call, on a leaking 55 - gallon drum of ethyl alcohol, at Velsicol Chemical, 1199 Warford Street at Bell Avenue., Engine 23-FS6-B5-D2 respond to a hazardous materials call, on a leaking 55 - gallon drum of ethyl alcohol, at Velsicol Chemical, 1199 Warford Street at Bell Avenue., 23?...13?...17...21?

EXAMPLE: Vocal Operator: Companies stand by (fire tone is given)... Engines 10-20-36-29-T9-T14-FS2-LW1-LW2-B3-B1-D3 respond to a hazardous materials call, on a leaking tanker containing 7,000 gallons of unleaded gasoline at Mapco Truck Terminal, 319 W. Mallory Avenue at Riverside Drive,. Engines 10-20-36-29-T9-T14-FS2-LW1-LW2-B3-B1-D3 respond to a hazardous materials call, on a leaking tanker containing 7,000 gallons of unleaded gasoline at Mapco Truck Terminal, 319 W. Mallory Avenue at Riverside Drive,. 10?... 20?... 36?... 29?... 2?... 20?... 25?... 14?

DISPATCHING TO RESCUE SITUATIONS.

The incident type for a rescue call is RC.

On any EMS incident, if multiple injuries are reported, additional emergency units may be dispatched, at the discretion of the Watch Commander.

Whenever rescue calls for the SORT Team to be dispatched they will always be dispatched as a team. Never disregard one piece of the team if they are to be utilized in any of the incidents listed below.

Response Levels for Rescues are as follows:

Automobile Accidents Involving Cars:		
1	Engine company	
1	Truck company or Rescue vehicle with rescue tool	
1	Battalion Chief	
1	Emergency Unit	
*	Emergency Unit Supervisor notified.	
*	Include one Division Chief, if the rescue involves unusual circumstances.	

Vehic	Vehicle Accidents Involving Tractor Trailers, Buses, Trains etc.:		
Rope	Rope Rescue Situations:		
Trend	Trench Rescue Situation:		
Water	Water Rescue Situations:		
Building Collapse:			
1	Engine company		
1	Truck company		
1	Battalion Chief		
1	Emergency Unit		
*	Emergency Unit Supervisor notified.		
*	Include one Division Chief, if the rescue involves unusual circumstances.		
	Also Dispatch The SORT Team as follows:		
1	Engine 13		
1	Closest Rescue Apparatus (Rescue 1 or 2)		
1	Unit 4		
1	Battalion 5		
1	501 (Battalion Chief Starrett 0800-1600 hours)		
1	Division 5 (Division Chief John Bondurant 24 hours a day)		

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DISPATCHING TO RESCUE SITUATIONS

Continued

CON	CONFINED SPACE ENTRY:		
1	Engine company		
1	Truck company		
1	Battalion Chief		
1	Emergency Unit		
*	Emergency Unit Supervisor notified.		
*	Include one Division Chief, if the rescue involves unusual circumstances.		
	Also Dispatch The SORT Team as follows:		
1	Engine 13 (Backup is Engine 17)		
2	Rescue Apparatus		
1	Unit 4		
1	Battalion 5		
1	501 (Battalion Commander Starrett 0800-1600 hours)		
1	Division 5 (Division Chief John Bondurant 24 Hours a day)		

Helicopter Rescue:		
If any re	rescue situation involves Fire personnel boarding a helicopter for rescue purposes,	
dispatch	dispatch the SORT TEAM to board the helicopter:	
	Dispatch The SORT Team as follows:	
1	Engine 13	
1	Closest Rescue Apparatus (Rescue 1 or 2)	
1	Unit 4	
1	Battalion 5	
1	501 (Battalion Chief Starrett 0800-1600 hours)	
1	Division 5 (Division Chief John Bondurant 24 Hours a day)	

Dispatching To A Rescue Call Continued

DEFINITIONS

<u>Air Bags</u> - Fire Squad 2, Rescue 1, and Truck 21 are equipped with air bags for lifting heavy objects in special rescue situations.

<u>Confined Space Rescue Situations</u> - A confined entry space is identified as any location that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, ditches and pits are spaces that may have limited means of entry); and is not designed for continuous employee occupancy. Dispatch the SORT Team (Engine13, Rescue 1 and 2, EU4, Battalion 5, 501 (B/C Starrett) and Division 5 (D/C Bondurant), in addition to the regular rescue assignment. Notify the incident commander of the dispatch. <u>The SORT Team will always be dispatched as a team</u>. Never disregard one piece of the team if they are to be utilized.

<u>Helicopter Rescue Situations</u> - If any rescue situation that involves Fire personnel boarding a helicopter for rescue purposes, dispatch the SORT Team and notify the Incident Commander.

<u>High-Rise Rescue Situations</u> - dispatch the SORT team (Engine 13, Closest Rescue 1 or 2, EU4, Battalion 5, 501 (B/C Starrett) and Division 5 (D/C Bondurant). in addition to the regular rescue assignment. Notify the incident commander of the dispatch. <u>The SORT team will always be dispatched as a team</u>. Never disregard one piece of the team if they are to be utilized.

<u>Industrial Accidents</u> – should include in addition to the normal rescue assignment the SORT Team, Engine 13, Closest Rescue 1 or 2, Unit 4, Battalion 5, 501 (B/C Starrett) and Division 5 (D/C Bondurant). An example of industrial accidents would be parties trapped in conveyor belts at manufacturing facilities etc.

Dispatching To A Rescue Call Continued

DEFINITIONS - Continued

SORT TEAM – The Specialized Operations Rescue Team Consists of Engine 13, Unit 4, Rescue 1 and Rescue 2. Backup Companies that have been specially trained are Engine 17 and Truck 8. This team is under the command of Division Chief Bondurant, Division 5 and Battalion Chief Starrett, 501.

<u>Water Rescue Situations</u> - should include in addition to the normal rescue assignment the SORT Team, Engine 13, Closest Rescue 1 or 2, Unit 4, Battalion 5, 501 (B/C Starrett) and Division 5 (D/C Bondurant). This is because they carry tag line messenger equipment. This excludes water rescue situations in smaller bodies of water such as swimming pools. If the incident is located in the Mississippi river notify the Coast Guard. If they do not have a boat to send, they have contact with most water vessels that usually respond without delay to rescue situations. **Notify EMA on all River Rescue situations**. For assistance in long term rescue situations notify the Shelby County Sheriffs Department and ask for Emergency Services to assist in the water rescue incident.

The procedure for dispatching a rescue call is:

EXAMPLE: Vocal operator: Companies stand by. (first responder tone is given)... Engine 13-Rescue 1-B4-EU4 respond to a rescue call, auto accident, Poplar Avenue at E. Parkway North. Engine 13-Rescue 1-B4-EU4 respond to a rescue call, auto accident, Poplar Avenue at E. Parkway North. 13?... 11?

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DISPATCHING TO A BOMB THREAT, BOMB DEVICE or EXPLOSIVE MATERIAL

When Fire Dispatchers receive a bomb threat from an individual, try to obtain the following:

QUESTIONS TO ASK

- 1. When is bomb going to explode?
- 2. Where is it right now?
- 3. What does it look like?
- 4. What kind of bomb is it?
- 5. What will cause it to explode?
- 6. Did you place the bomb?

THREAT LANGUAGE		
	Well Spoken (educated	
	Incoherent	
	Foul	
	Taped	
	Message read by threa maker	
	Irrational	

When a bomb threat or an explosive material threat is received, notify Police Communications and EMA.

If a **bomb threat** is received by the Police Department and they request the Fire Division to respond, they will notify Fire Communications and EMA. When a <u>THREAT</u> has taken place and Police are requesting the Fire Department, Fire Communications will dispatch the Disaster Coordinator (Division 6 Looney), or if unavailable a Battalion Chief.

The Fire Divisions Disaster Coordinator (Division 6 Looney) or Battalion Chief that is dispatched will confer with the Law Enforcement IC, and become a liaison for the Fire Division.

The Fire Divisions Liaison will request any equipment needed due to the THREAT. The Liaison may request Fire Companies to report to a staging location some distance from the scene as to not excite the situation or the party(s) responsible for the THREAT.

DISPATCHING TO A BOMB THREAT, BOMB DEVICE or EXPLOSIVE MATERIAL

Continued

A buildup of Fire companies and staging will not occur until the Fire Department liaison has been advised that a device or explosive material <u>has been found or detected</u>.

Example: After a Device has been located at a larger occupied building.

Division 6 Division 6 Send me two task forces and have them report to the

1's engine house and standby.

Fire 1 Check Division 6

If Fire Communications is notified that **a bomb device or explosive material has been located** and the Fire Department is requested, dispatch the following companies and have them stage at least 1500' from the incident scene. The Battalion Chief will make contact with the Law Enforcement Incident Commander and advise companies of any orders:

First Alarm Fire Assignment for the structure involved.

1 - Emergency Unit.

Disaster Coordinator Division 6 Looney.

Division Chief.

Remember the key to this policy is knowing the difference between a bomb THREAT and a BOMB DEVICE being found.

If a Fire Alarm is received before a threat is made, dispatch the required assignment of companies. If a fire alarm is received after the liaison or Battalion Chief is on the scene make the Incident Commander aware of the Fire Alarm being received.

DISPATCHING TO A BOMB THREAT, BOMB DEVICE or EXPLOSIVE MATERIAL

Continued

Bomb Threats Against Armour Center:

When information is received that a bomb threat has been made against the Armour Center facility, Fire Communications will immediately:

- 1. Notify the Memphis Police Department of the threat, and also have them to notify the Police Central Precinct.
- 2. If during working hours notify all areas of the building (except for Fire Communications) for personnel to exit the building till an OK is received from MPD. Personnel should be instructed to report to the Gymnasium.
- 3. If during or after working hours notify personnel attending any training sessions in the classrooms to exit until an OK is received from the MPD.
- 4. Remember to notify Radio Repair personnel.
- 5. Secure the front door to Armour Center.

When a Threat is received against Armour Center:

- 1. Director of Fire Services.
- 2. Deputy Director of Fire Services.
- 3. Manager of Communications.
- 4. Chief of Training.

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DISPATCHING FIRST RESPONDER CALLS

The closest fire company to the scene of a medical emergency is the first responder. The Memphis Fire Department will dispatch first responders based on the EMD determinant code entered into the CAD system by the Calltaker. First Responders will not be dispatched on Alpha calls unless there are no MFD Units available and a private Unit is being dispatched. Intervention by the dispatcher may be required when an Emergency Unit has an extended response time on Bravo, Charlie and Delta calls.

FIRST RESPONDER DISPATCH CRITERIA

Determinant Classification	First Responder Criteria	Response Mode
ALPHA	None unless no MFD Units available.	If dispatched, COLD Response.
BRAVO	None unless 4th Unit or greater in or no MFD Units available.	If dispatched, HOT Response.
CHARLIE	As suggested by CAD or extended Unit response time.	HOT Response.
DELTA	As suggested by CAD or extended Unit response time.	Hot Response.

Send the nearest available first responder company. If the nearest station has an Engine company and a truck company, dispatch the truck company unless the Engine is an ALS Engine. If the Truck company suggested for dispatch is an Emergency One (E-One) Platform Truck (Truck 2, 7 or 16) dispatch the Engine company first. If the Engine company that is housed with the E-One Truck company is out of service then send the E-One Platform Truck company (Truck 2, 7 or 16). If the nearest station has an Engine company and a Squad, dispatch the Engine company as the first responder.

On some calls, the first responder and the emergency unit will be dispatched out of the same station at the same time.

First Responder Calling For An ALS First Responder

Certain fire companies are staffed with state certified Paramedics. These companies are ALS first responder companies. A first responder company may report on the scene and make a determination based on the availability of emergency units, number of trauma patients and degree of injury that they need an ALS first responder company and may request one. Fire Communications will dispatch an ALS first responder when requested.

Dispatching To A First Responder Call Continued

Emergency Unit Requesting A First Responder:

If an Emergency Unit requests that a first responder be dispatched. Dispatch one based on the following:

- 1. The availability of a first responder company. Are any available?
- 2. If no company from the first or second engine house are not available, advise the Unit that no first responders from the two closest stations are not available, do you still want one dispatched.

Do not confuse this when a Unit requests a company for assistance while on the scene. Always dispatch a fire company when requested for assistance. If the company will have an extended run time, advise the Unit that is requesting them.

When dispatching a first responder call, the vocal alarm operator will include the nature of the medical emergency and which emergency unit is responding. The procedure for dispatching a first responder is:

EXAMPLE: Vocal operator: Companies stand by. (first responder tone is given)... Engine 51 and Unit 5 respond to a [EMD Code is given 9D1] suspected cardiac Arrest at Shoney's, Summer Avenue at Sycamore View Road. Engine 51 and Unit 5 respond to a [EMD Code is given 9D1] suspected cardiac arrest at Shoney's, Summer Avenue at Sycamore View Road, 51?...24?

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Dispatching To A First Responder Call Continued

Dispatching First Responders To Memphis International Airport - when unit 19 is unavailable:

When an emergency call is received for Memphis International Airport, and Unit 19 is unavailable, a first responder company will be dispatched with the emergency unit, regardless of the nature of the call. If the call is INSIDE the secured area, dispatch Engine 33 first since they are a ALS company, and then A2 or A5 as the first responder. However, if the call is OUTSIDE the secured area, dispatch Engine 33 first and then Truck 16 if Engine 33 is not available as the first responder.

SURROUNDING CITY STREETS: Winchester Road (including the tunnel), Airways Rd. Plough Blvd., and other surrounding city streets are NOT included in the secured area.

DISPATCHING INSIDE SECURED AREA: When dispatching INSIDE the secured area, always dispatch Engine 33 first. If 33 is unavailable, dispatch A2 and then A5. If A2 and A5 are also not unavailable, then dispatch Truck 16 as the first responder.

DISPATCHING OUTSIDE SECURED AREA: When dispatching OUTSIDE the secured area, always dispatch Engine 33 (ALS) first. If 33 is unavailable, then dispatch Truck 16. If 33 and Truck 16 are both unavailable, then dispatch the nearest company, excluding Air Crash apparatus. Air Crash apparatus is restricted in responding outside the secured area due to size and weight limitations.

TERMINAL BUILDING AND GATES: When a call is received to the terminal building, it is necessary to differentiate between the Terminal building and the arrival/departure gates. The actual gates are within the secured area, but the terminal building is outside the secured area.

DISPATCHING SINGLE-ENGINE COMPANY RESPONSES.

The Response Levels For Single-Engine Company Responses Are:

CT - Curtailed response. (Check fire danger, wires down, odor, automatic alarm, etc.)

TS - Trash fire

GR - Grass fire

AU - Automobile fire

TK - Truck fire

WG - Fuel spill

The response for these incident types is one engine company. When dispatching these types of incidents, the vocal alarm operator will include the exact nature of the call and any other information that is pertinent to the incident. The procedures for dispatching single-engine company responses are:

- EXAMPLE: Vocal operator: Companies stand by. (fire tone is given)... Engine 17 respond ...check a stove, 3431 Coleman Road near Highland Street. Engine 17 respond check a stove, 3431 Coleman Road near Highland Street, 17?
- EXAMPLE: Vocal operator: Companies stand by. (fire tone is given)... Engine 17 respond to a trash fire, 610 Lipford Street at Summer Avenue. Engine 17 respond to a trash fire, 610 Lipford Street at Summer Avenue, 17?
- EXAMPLE: Vocal operator: Companies stand by. (fire tone is given) ... Engine 16 respond to a grass fire, Lamar Avenue at Park Avenue. Engine 16 respond to a grass fire, Lamar Avenue at Park Avenue, 16?
- EXAMPLE: Vocal operator: Companies stand by. (fire tone is given) ... Engine 11 respond to an automobile fire, Union Avenue at McLean Boulevard. Engine 11 respond to an automobile fire, Union Avenue at McLean Boulevard., 11?
- EXAMPLE: Vocal operator: Companies stand by. (fire tone is given)... Engine 21 respond to a truck on fire, Poplar Avenue at Mendenhall Road. Engine 21 respond to a truck on fire, Poplar Avenue at Mendenhall Road, 21?
- EXAMPLE: Vocal operator: Companies stand by. (Fire tone is given)... Engine 28 respond to a fuel spill, Chelsea Avenue at McLean Boulevard. Engine 28 respond to a fuel spill, Chelsea Avenue at McLean Boulevard, 28?

DISPATCHING TO LOCKED VEHICLES

A fire company will be dispatched to a report of someone locked out of their vehicle ONLY if:

- 1. A person is inside the vehicle and unable to open a door or window, or,
- 2. The vehicle engine is running.

If a person is inside the vehicle, dispatch the nearest company (engine, truck, or squad) for rescue.

If the vehicle engine is running, dispatch the nearest engine company to check for fire danger.

The procedure for dispatching to this type of alarm is:

- EXAMPLE: Vocal operator: Companies stand by... (first responder tone is given) .. Truck 23 respond to a report of a child locked in a car at Children's Palace, 3481 Austin Peay Hy. near Coleman Rd. Truck 23 respond to a report of a child locked in a car at Children's Palace, 3481 Austin Peay Hy. near Coleman Rd., ...47?
- EXAMPLE: Vocal operator: Companies stand by... (first responder tone is given) ... Engine 45 respond to a report of a vehicle locked with the engine running, check for fire danger W. Holmes Road at S. Third Street. Engine 45 respond to a report of a vehicle locked with the engine running, check for fire danger, W. Holmes Road at S. Third Street,...45?
- NOTE: When the company officer has determined that there is no fire danger, they will advise the owner/operator of the vehicle to call a private locksmith. The fire company will then return to service. Per (100)

DISPATCHING TO EMERGENCY MEDICAL CALLS

The incident type for emergency medical calls is determined by the EMD matching the symptoms (or combination of symptoms) discovered through interrogation and sending the appropriate response as indicated in the "determinant/Response" section of the protocol. Each of the four levels of response, ALPHA, BRAVO, CHARLIE, and DELTA, are based on the "Determinants." Each Determinant is, in essence, an answer the EMD received during questioning. If an EMD identifies a Determinate in one of the four levels of response, they dispatch the response configuration as indicated. The following information will be given on ALL emergency medical calls:

- 1. Which unit is to respond and first responder company (if applicable).
- 2. EMD Response Configuration Code (9D1).
- 3. Address & cross-street including the 'street type'.
- 4. Name of occupancy (apartment name, business, etc.).
- 5. Exact location within the occupancy.
- 6. Any other pertinent information.

The procedure for dispatching emergency medical calls is:

EXAMPLE: Vocal operator: companies stand by. (medical tone is given) ... Unit 4 respond to an auto accident, Poplar Avenue at E-Parkway North. Unit 4 respond to an auto accident, Poplar Avenue at E. Parkway North, ...13?

It is acceptable for the vocal alarm operator to precede the nature of the call and address with "Emergency Call".

If the EMD dispatch code suggest a first responder company, the vocal alarm operator will dispatch a first responder company at the same time as the emergency unit.

If information is received that more than one emergency unit may be needed, additional units may be dispatched at the discretion of the Watch Commander.

When an emergency unit is dispatched, and the dispatcher states an address number and a street name, this constitutes a dispatch and the radio operator must count this as a run.

Dispatching To Emergency Medical Calls Continued

Fire Companies requesting an Emergency Unit:

When a fire company requests an emergency unit be dispatched to the scene of an incident. Fire Communications should attempt to obtain the disposition for the unit. It is not necessary to assign a response code configuration for the incident. The response mode for the responding unit will be with lights and siren, unless otherwise instructed by the company on the scene.

When dispatching the emergency unit, the vocal alarm operator will include the nature of the medical emergency and which company requested the unit. The procedure for dispatching an emergency unit to this type of situation is:

EXAMPLE: Vocal Operator: Companies stand by. Unit 1 respond to a fire scene, Engine 1 is requesting a unit for a burn victim at 100 North Main Street. Companies stand by. Unit 1 respond to a fire scene, Engine 1 is requesting a unit for a burn victim at 100 North Main Street. 7?

Diverting EMS Units Responding to ALPHA Level Calls:

Whenever an emergency unit that is en route to an ALPHA level call suggests they are closer to the scene of a higher level EMS call, it is appropriate, at the discretion of the EMS Radio Operator, to divert the emergency unit to the higher level call and dispatch another unit to the ALPHA level call. It is also appropriate for the Vocal Alarm Operator or EMS Radio Operator to divert a unit on their own accord in regards to Priority Dispatching.

DISPATCHING APPARATUS WITH LIMITED MANPOWER

When a fire company reports on limited manpower, it will not be dispatched on fire calls. It may, however, be dispatched on first responder calls. Any engine, truck, rescue that has 4 personnel, one being an officer, is in full service. However, only certain fire companies may be in full service with three personnel, including an officer. Any company reduced to less than three personnel is out of service and will not be dispatched to any type of call.

COMPANY	MANPOWER	<u>STATUS</u>
4-MAN	4 OR MORE, INCLUDING OFFICE	IN SERVICE
4-MAN	3, INCLUDING OFFICER	LIMITED MANPOWER
4-MAN	LESS THAN 3	OUT OF SERVICE
3-MAN	3, INCLUDING OFFICER	IN SERVICE
3-MAN	LESS THAN 3	OUT OF SERVICE

DISPATCHING BRUSH TRUCK 5 AT STATION 37

Brush Truck 5 at Station 37 is a reserve brush truck. It will not be dispatched by FIRE COMMUNICATIONS unless the other four brush trucks are out of service or unavailable. However, Engine 37 may take Brush Truck 5 when they respond in certain areas. This will be done at the discretion of the officer on Engine 37.

DISPATCHING MAGNUM I AND MAGNUM II

Magnum I and Magnum II will be dispatched upon request or at the discretion of the Watch Commander. When dispatching Magnum I or Magnum II, the following will apply:

MAGNUM I: If Magnum I is to be dispatched, a fire company will be dispatched with it to man and operate the Magnum. Dispatch Engine 26 first. If Engine 26 is unavailable, dispatch Truck 11. If both Engine 26 and Truck 11 are unavailable, dispatch Engine 6. No other companies will be dispatched with Magnum I at this time.

MAGNUM II: If Magnum II is to be dispatched, a fire company will be dispatched with it to man and operate the Magnum. Dispatch Engine 33 first. If Engine 33 is unavailable, dispatch Engine 42. No other companies will be dispatched with Magnum II at this time.

DISPATCHING FIRE BOAT 1

- 1. Dispatch Engine 5 to the present launch sight, which is the Mud Island Marina. If Engine 5 is unavailable, dispatch Engine 9. If Engines 5 and 9 are both unavailable, Engine 5 must make themselves available immediately to man the fire boat. If they are on a fire call, dispatch another engine company to replace them on the scene. If they are out of service for training, they will immediately be put into service and report to the launch sight. If they are out of service for mechanical reasons, the Watch Commander will coordinate with Division 1 and Apparatus Maintenance to immediately get the crew of Engine 5 to the launch sight.
- 2. Dispatch Battalion 3 and Division 1 to the launch sight. If either is unavailable, dispatch another Battalion or Division instead. However, Battalion 3 or Division 1 MUST respond to the launch sight, as their cars are equipped with marine radios.
- 3. Dispatch Light Water 2 and the nearest truck company to the cobblestones at the foot of Union Avenue at Riverside. This will be the designated "foam transfer" sight, unless otherwise designated by Division 1 or the appropriate command officer. Also, contact the police communications supervisor and have them dispatch the police boat to the cobblestones at the foot of Union Avenue. Foam containers will be transferred from Light Water 2 onto the police boat, and the police boat will deliver them to Fire Boat 1.
- 4. If an air operation is requested, contact the police communications supervisor on the availability of one of the police helicopters. Dispatch one Battalion Chief to one of the sights below to meet the police helicopter. This Battalion Chief will go up in the helicopter and give status reports to the incident commander as needed. Choice of locations:
 - 1. Dewitt Spain Airport, N. Second St.
 - 2. Tom Lee Park, Riverside & Beale
 - 3. McKellar Lake Parking Lot, Riverside Park
 - 4. Jesse Turner Park, Bellevue @ S. Parkway
 - 5. Baptist Hospital Helipad, Union @ East
 - 6. Armour Center Drill field, 79 Flicker
- 5. The incident commander will authorize Fire Communications to discontinue (or cancel) foam transfer operations and helicopter operations. If the Watch Commander feels that either of these operations is unnecessary due to information received, the Watch Commander will communicate this to the incident commander, and the incident commander will make the decision.

Dispatching Fire Boat Continued

- 6. Contact the United States Coast Guard and notify them that the fire boat is responding to an incident, and request that they respond with Fire Boat 1. The telephone numbers are in the CAD system under INFO-COAST.
- 7. If the response is for a situation not involving fire, such as a rescue situation, #3 above (concerning foam transfer) will be disregarded.

DISPATCHING HIGH PRESSURE 1

High Pressure 1 is to be automatically dispatched on all multiple alarm fires. High Pressure 1 has been placed at Fire Station 42. Engine 42 will take the High Pressure vehicle to the scene when dispatched. Other fire companies have been trained in the operation of High Pressure 1 if engine 42 is not available to respond with High Pressure 1. The other companies qualified to respond with High Pressure 1 are as follows:

Engine 39, 29 and 33.

DISPATCHING TO ELEVATOR RESCUE CALLS

When a call is received reporting that an elevator is stuck and people are on the elevator, the following assignment will be dispatched:

- 1 Truck company
- 1 Battalion Chief

NOTE: This type of call will be broadcast on the FIRE1 Radio as a Rescue Call.

EXAMPLE: FIRE1 Operator: "Rescue call, stuck elevator, Peabody Hotel, 149 Union

at S. Third, T5-B1 responding, (time)"

DISPATCHING AIR TRUCK 1 AND AIR TRUCK 2

Air Truck 1 or Air Truck 2 will only be dispatched under the following circumstances:

- 1. Multiple alarm fire (including SOP upgrade)
- 2. When a working fire (2 or more lines are laid, not including boosters or supply lines) occurs, Fire Communications may ask the incident commander if the air truck is needed.

Other than situations listed above, the Air Truck will only be dispatched when requested by the Incident Commander.

As a general rule for dispatching the Air Trucks, always dispatch Air Truck 1 first. If Air Truck 1 is unavailable, then dispatch Air Truck 2.

DISPATCHING AND OPERATING GUIDELINES - HOSPITAL WING UNITS

utilizing fire radio talkgroup



- 1. Fire Communications will contact MedCom on 545-8181 to request a Wing helicopter unit.
- 2. Wing units will be identified accordingly as Wing 1, Wing 2, and Wing 3.
- 3. Wing units will utilize fire department frequencies when involved in incidents to which the Memphis Fire Department responds, or to report a fire or other emergency to the fire department radio operator.
- 4. Wing units will transmit and receive on radio talkgroup "D5 EMGRD". The wing helicopter will be on old Fire F5 Frequency 453.950. This has been cross-patched on one of the fire radio consoles to talkgroup "D5 EMGRD". MEDCOM will contact Fire Communications and request to have fire personnel switch to "D5 EMGRD" talkgroup if the Wing needs to talk to ground personnel when landing.
- 5. From that point, communications between the Wing helicopter and fire personnel on the scene will be accomplished by transmitting on radio talkgroup "D5 EMGRD".
- 6. Wing units may request the Incident Commander to advise if a "turn around in flight" will be necessary. This terminology means to pickup an injured party transport to the hospital and turn around, return to the scene and transport additional injured parties.

INCREMENTAL TIME NOTIFICATION DURING INCIDENTS

Fire Communications will notify the Incident Commander at each 15-minute interval until an incident is declared "under control" during the following incidents:

- 1. Structure Fires
- 2. Hazardous Materials Incidents
- 3. Other incidents conducted during stressed weather (below 20 or above 85 degrees)

Time notification will be determined from the time of alarm receipt.

Time notification will be given in the following format:

"Union Command, incident time is 0 plus 15"

"Union Command, incident time is 0 plus 30"

"Thomas Command, incident time is 1 hour 15 minutes"

"Thomas Command, incident time is 1 hour 45 minutes"

The Incident Commander will acknowledge the time notification by radio and note the notification on the tactical work sheet.

Time notifications will cease when the Incident Commander places the incident "under control" or when the Incident Commander notifies Fire Communications the "time notifications are not required."

LEVEL 2 STAGING AND AUTOMATIC UPGRADE OF ALARMS

Level 2 Staging is a designated staging area that has been established by the Incident Commander. When a staging area is designated, dispatch one Battalion Chief to assume control of Staging. If the incident commander calls for additional Division Chiefs and Battalion Chiefs, dispatch them to the Command Post and not to staging. The Incident Commander will specify how many companies are requested for Staging. Each time an engine company or truck company is pulled from Staging, the Staging officer will notify FCB and another engine or truck will be dispatched to replenish Staging. When the number of ENGINE companies replenished to staging equals the number of engine companies dispatched initially, the incident will be upgraded to the next higher alarm level by FCB. FCB will notify Command and ask whether staff personnel should be notified. The automatic replenishing of Staging and upgrading of alarms process will continue until the incident is under control. After the incident is declared under control, additional companies may still be requested, due to ruins, relief, etc., but the process of keeping count of engine companies toward the next higher alarm level will discontinue. It is not necessary for a Level 2 Staging to be declared for FCB to automatically upgrade to the next higher alarm level. If additional engine companies are requested and Staging has not been established, the incident will still be upgraded accordingly.

EXAMPLE: Companies are dispatched to an apartment fire at 2001 Fairfall Dr. Engines 42-33-39-T16-T18-B10-D3.

Companies arrive and have a working fire, and Command requests 2 engines and 1 truck for Staging. FCB dispatches Engines 29-40-T19 to Staging, along with B3.

Staging later reports that Engine 29 is being pulled from Staging, and FCB dispatches Engine 34 to replace Engine 29. The number of engine companies sent to Staging now equals the number dispatched initially, so the incident is upgraded to a second alarm. FCB notifies Command, and asks if staff personnel should be notified.

EXAMPLE: Companies are dispatched to a house fire at 203 S. Goodlett Street: Engines 18-30-T12-B7-D4.

Companies arrive and have a working fire, and Command requests an additional engine company. Engine 17 is dispatched. Later, Command requests another engine company, and Engine 21 is dispatched. The number of additional engine companies dispatched now equals the number dispatched initially, so the incident is upgraded to a second alarm. FCB notifies Command, and asks if staff personnel should be notified.

PROCEDURES WHEN REHAB IS SET UP AT AN INCIDENT

When the Incident Commander request REHAB at the scene of an incident, the following procedures will take place.

When Rehab is called for, the following guidelines shall be followed:

- 1. The Incident Commander will advise the location where Rehab is to be established, and if a MATA / Fire bus will be needed due to climatic conditions. (*Should be located several floors below the fire in a High-Rise fire*).
- 2. Fire Communications will dispatch one Emergency Unit specifically for Rehab, if one has not already been assigned this duty. The weather conditions will be given to the Emergency Unit responding. The Emergency Unit Supervisor will be dispatched/notified that Rehab has been established.
- 3. The P-II will be designated as the Rehab Officer after arriving on the scene and establishing a Rehab area. The Rehab Officer will report directly to the Incident Commander. Additional Units may be requested, depending on the amount of medical care required in the Rehab Sector.

REQUESTS FOR MUTUAL AID

Mutual aid requests will be accepted from other governmental agencies, such as fire or police departments, etc. Dispatching of fire apparatus or emergency units outside the city limits of Memphis will be authorized by one of the following, in order. If the person being notified for approval is unavailable, proceed to the next person on the list:

Inside Shelby County!

- 01. The on duty Watch Commander may approve any request for fire mutual aid requested by any governmental fire authority within Shelby County up to and including 1 Engine Company, 1 Truck Company, and 1 Battalion Chief. The Watch Commander must notify the on Duty Division Chief, Emergency Operations Chief and the Director and Deputy Diector after the mutual aid has been dispatched.
- 02. Any requests for additional equipment, hazardous material response, specialized rescue or EMS responses must be approved by an on-duty Division Chief. The Watch Commander will notify the Emergency Operations Chief, Director and Deputy Director after mutual aid has been dispatched.
- 03. If the on-duty Division Chief is not available, approval for mutual aid will follow the following progression.
 - a) Emergency Operations Chief
 - b) Deputy Director
 - c) Director

Outside Shelby County, (But Within The State Of Tennessee)

- 01. Director
- 02. Deputy Director
- 03. Emergency Operations Chief
- 04. Division Chief, in close proximity, will authorize mutual aid.

Continued -

Requests For Mutual Aid Continued

Outside the State Of Tennessee

Mutual Aid requests that are <u>outside the State of Tennessee</u> should be authorized by the Director or in the Directors absence the Deputy Director. In the event they cannot be reached, contact the Emergency Operations Chief. This section of the SOP includes responses that may occur on the Hernando Desoto bridge (I-40) or the old bridge (I-55) that are outside the City of Memphis and inside of the State of Arkansas. This also includes responses that may occur inside the State of Mississippi. Before companies can make the scene of an incident in the State of Arkansas or Mississippi this procedure must be followed.

- 01. Director.
- 02. Deputy Director.
- 03. Emergency Operations Chief.

After obtaining approval and dispatching, routinely notify the others listed above of what action was taken. <u>DO NOT</u> notify the CAO or Mayor unless ordered to do so by the Director.

This procedure applies to ALL types of mutual aid, whether the request is for fire apparatus, hazmat, EMS, etc., excluding responses already covered by existing agreements, such as the Roseleigh & Northwood Hills agreement, in which response is automatic.

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MUTUAL RESPONSE TO ROSELEIGH AND NORTHWOOD HILLS SUBDIVISIONS

Effective May 19, 1989, there is a reciprocal agreement between the City of Memphis and Shelby County to provide mutual fire service response to the Roseleigh subdivision off Germantown Road (in city) and the Northwood Hills Subdivision off Egypt-Central Road (in county). The procedures for dispatching to these areas are as follows:

ROSELEIGH

Calls should come to the Memphis Fire Department for dispatch. Fire Communications will dispatch according to CAD system and then notify Shelby County Fire Department to respond. Shelby County Fire Department will dispatch one engine company to assist.

NORTHWOOD HILLS

Calls should go to the Shelby County Fire Department for dispatch. Shelby County will dispatch accordingly and then request Memphis Fire Communications to dispatch one engine company to assist.

Terms of the agreement stipulate that assistance will only be used for fire control, and for no other purpose.

RADIO TERMINOLOGY - reporting at destinations, locations, and requests.

The following signal codes have been replaced with common language terminology. Any radio using the codes below will be corrected by the radio operator to use the correct terminology.

	T
NONE at Fire	e Investigations (2201 Lamar)
Station A at Ma	terial Services
Station D in Dis	trict
Station H specia	al-residence
Station O out of	District
Station R at Fire	e Prevention
Station S at App	paratus Maintenance
Station T at Arm	nour Center
Signal C (Distress) Signal	l C (Distress) (Same)
Signal F we ha	ve a fatality
Signal G send a	a gas man
Signal H contact	ct your residence
Signal K send a	a Fire Investigator
Signal L send a	a light man (specify inside or outside)
Signal M report	to Apparatus Maintenance
Signal Q report	t to Headquarters
Signal S call A	pparatus Maintenance
Signal T report	to Armour Center
Signal W send a	a water man
Signal X call Fi	ire Communications

SIGNAL C

When the code letter "Signal C" (distress call) is requested:

- 1. The Fire Dispatcher will immediately notify the police dispatcher that <u>fire</u> department personnel are radioing in that an "Officer Needs Help" situation exists involving a possible life threatening situation, and we are asking for an immediate response from the police department.
- 2. Any on-duty Fire Investigators should be dispatched for immediate response.
- 3. The Battalion Chief and Division Chief in whose area the incident occurs will be notified, but will use their discretion on responding.
- 4. If the 'Signal C' is requested by an emergency unit, the EMS Supervisor will also be notified, but will use their discretion on responding.
- 5. Notify the Emergency Operations Chief, Deputy Director, Manager of EMS if it involves an Emergency Unit, and ask the Deputy Director if notifying the Director is necessary.

Radio Terminology - Destinations, Requests, And Correction Of Improper Radio Procedures. Continued

CODE YELLOW

Should a situation arise in which Fire Communications needs to communicate an urgent "private" message to personnel in the field, FIRE COMMUNICATIONS will advise "code yellow." The unit involved will acknowledge and move to an area in which incident victims or the public can not overhear the radio transmission, then advise FIRE COMMUNICATIONS to proceed with the message. A CODE YELLOW is used when privacy is needed, but imminent danger to personnel is not apparent. The radio operator should have personnel switch to Radio Talkgroup "CTC" if possible for these messages.

EXAMPLE: Companies are on the scene of a house fire from which two victims have been transported for smoke inhalation. Fire Communications receives information from the hospital that one of the patients has expired. Fire Communications should advise command of a "code yellow" and have command switch to Radio Talkgroup "CTC" if possible for these messages.

If a unit request an ETA on the police and does not want the patient to hear the ETA, the Unit should request it in the following manner.

Example: U11 give me a *CODE YELLOW ETA* on the police.

Dispatcher: U11 switch to Radio Talkgroup "CTC" if possible for your CODE YELLOW

ETA time, and advise when your ready.

Unit 11: Unit 11 on Radio Talkgroup "CTC", go ahead.

Dispatcher: U11 ETA is 3 to 5 minutes.

January 5, 2000

Radio Terminology - Destinations, Requests, And Correction Of Improper Radio Procedures.

CODE RED

Should a situation arise in which Fire Communications needs to communicate to personnel in the field that imminent danger exists, and they should leave the area immediately, Fire Communications will advise "code red". When this occurs, personnel should acknowledge the message and immediately retreat to a position of safety. Personnel should then contact Fire Communications to clarify the situation.

EXAMPLE: Unit 3 is on the scene of a sick party when the police call and advise that the patient may be armed and dangerous. Fire Communications advises Unit 3 "code red," so that personnel may immediately clear the danger area.

RADIO BROADCAST OF AN EMERGENCY CALL THAT DOES NOT REQUIRE THE RADIO NOTIFICATION OF AN EMERGENCY UNIT TO RESPOND

The EMS1 Radio operator will broadcast "Emergency Call," the nature of the emergency, the name of business or apartments, etc., address, cross-street, responding emergency unit, and the time.

EXAMPLE: EMS1 Oper: "Emergency call, auto accident, Poplar Avenue at East

Parkway - North, Unit 4 responding 17:15."

EXAMPLE: EMS1 Oper: "Emergency call, party passed out, K-Mart store, 5124

Summer Avenue at N. White Station Road, Unit 5

responding, 20:31."

RADIO BROADCAST OF AN EMERGENCY CALL THAT REQUIRES THE RADIO NOTIFICATION OF AN EMERGENCY UNIT TO RESPOND

The EMS1 Radio operator will advise the emergency unit to respond, giving the nature, the name of building, etc., address, cross-street, and any other pertinent information. After notifying the unit to respond and receiving acknowledgment, the EMS1 Radio operator will broadcast the call.

EXAMPLE: EMS1 Oper: "Unit 3, respond to an emergency call, a 27D1G, a shooting,

at Mississippi Boulevard and McLemore Street, Unit 3?

EU3: "Check Unit 3"

EMS1 Oper: "Emergency call, shooting, Mississippi Boulevard and

McLemore Street, Unit 3 responding, (time)."

In some cases, it will be necessary for the EMS1 Radio operator to obtain the location of an emergency unit that shows to be on the air. This will assist the vocal alarm operator in dispatching the nearest available emergency unit. The procedure for obtaining a unit's location is:

EXAMPLE: EMS1 Oper: "Unit 7, your location?"

EU7: "Unit 7, Poplar at Erin"

EMS1 Oper: "Check Unit 7, respond to an emergency call, a 31D1, party

passed out on the 4th floor of Clark Tower, 5100

Poplar Avenue at Harvey Street, Unit 7?"

EU7: "Check Unit 7"

EMS1 Oper: "Emergency call, party passed out, Clark Tower, 5100

Poplar Avenue at Harvey, Unit 7 responding, (time)"

When an emergency unit is dispatched over the air with another piece of equipment, and no acknowledgment is received, the dispatcher must assume the unit personnel are on their portable radios and have been "Regrouped". The dispatcher must verify through the CAD system which fireground channel they have regrouped to and attempt to raise the unit to switch back to talkgroup "EMS1" for a run.

When an emergency unit is dispatched, and the dispatcher states an address number and a street name, this constitutes a dispatch and the radio operator must count this as a run.

RADIO BROADCAST OF FIRE CALLS THAT DO NOT REQUIRE THE RADIO NOTIFICATION OF COMPANIES TO RESPOND

FIRES (MULTI-COMPANY RESPONSE) - FIRE Radio operator will broadcast "Alarm of fire", name of building, etc., address including street type (street, avenue road etc.), cross-street, responding companies, and the time.

EXAMPLE: "Alarm of fire, Armour Center, 79 Flicker Street at Avery Avenue, Engines 13-11-16-T4-T7-B6 responding, (time)"

EXAMPLE: "Alarm of fire, 3732 Philwood Avenue at High Point Terrace, Engines 17-24-T8-B5 responding, (time)"

AUTOMATIC ALARMS (MULTI-COMPANY RESPONSE) - The FIRE Radio operator will broadcast "Automatic alarm", name of building, etc., address, cross-street (including street types), responding companies, and the time.

EXAMPLE: "Automatic alarm, Memphis Airport Hotel, 2240 Democrat Road at Airways Boulevard, Engines 42-33 29-T16-T19-B10 responding, (time)"

RESCUE CALLS (MULTI-COMPANY RESPONSE) - The FIRE radio operator will broadcast "Rescue call", type of rescue situation, name of building, etc., address, cross-street (including street types), responding companies, and the time.

EXAMPLE: "Rescue call, auto accident, Summer Avenue at Highland Street, Engine 17-T8-B5 responding, (time)"

EXAMPLE: "Rescue call, man trapped, Cargill Co., 2330 Bouy Avenue at Channel Avenue, Engine 32-T9-B3 responding, (time)"

HAZARDOUS MATERIALS CALLS - FIRE Radio operator will broadcast "Hazardous materials call", name of building, etc., address, cross-street (including street types), responding companies, and the time.

EXAMPLE: "Hazardous materials call, Velsicol Chemical, 1199 Warford Street at Bell Avenue, Engine 23-FS6-B6-D2 responding, (time)"

Radio Broadcast Of Fire Calls That Do Not Require The Radio Notification Of Companies To Respond.

Continued

FIRST RESPONDER CALLS - FIRE Radio operator will broadcast the fire company number, "first responder call", name of building, etc., address, cross-street, (including street types), and the time. Calls for first aid, assistance, or resuscitator will be broadcast as first responder calls.

EXAMPLE: "T7 first responder call, Credit Union, 2608 Avery Avenue at Hollywood Street, (time)"

AIRPORT ALERTS I, II, OR III. - FIRE Radio operator will broadcast the alert level, "Memphis International Airport", responding companies, and the time.

EXAMPLE: "Alert I, Memphis International Airport, A1-A2-A3 responding, (time)"

EXAMPLE: "Alert III, Memphis International Airport, A1-A2-A3, Engines 33-42- 40-34-22-39-T16-T18-FS6-B8-B10-B6-D2 responding, (time)"

SINGLE-COMPANY FIRE CALLS. - FIRE Radio operator will broadcast the fire company number, "fire call", type of fire call, name of building, etc., address, cross-street (including street types), and the time.

EXAMPLE: "Engine 16 fire call, grass, Flicker Street at Avery Avenue, (time)"

EXAMPLE: "Engine 23 fire call, automatic alarm, 1400 Depass Street at Bayliss Road, (time)"

EXAMPLE: "Engine 28 fire call, fuel spill, Chelsea Avenue at McLean Street, (time)"

RADIO BROADCAST OF ALARMS THAT REQUIRE THE RADIO NOTIFICATION OF COMPANIES TO RESPOND.

FIRE Radio operator will broadcast the company number, tell them to respond, advise the type of call, name of building, etc., address, cross-street (including street types), and any other pertinent information. After broadcasting and receiving acknowledgment, the FIRE Radio operator will then broadcast the alarm, listing all of the responding companies.

EXAMPLE: FIRE1: "Truck 8, respond to a first responder call, an auto

accident, at Summer Avenue and Holmes Street, Truck 8?"

TRUCK 8: "Check Truck 8, auto accident, Summer Avenue at Holmes

Street"

FIRE1: "Truck 8 first responder call, Summer Avenue at Holmes

Street, (time)"

When dispatching Battalion Chiefs and Division Chiefs the FIRE Radio operator will precede the alarm information with the notification to "Stand-By".

EXAMPLE: FIRE1 Oper: "Battalion 5 stand-by"

Battalion 5: "Check Battalion 5"

FIRE1 Oper: "Battalion 5, respond with other companies to a report of a

house on fire at Bartlett Road and Crestview Street, Battalion

5?"

Batt.5: "Check Battalion 5, house on fire, Bartlett Road at Crestview

Street"

FIRE1 Oper: "Alarm of fire, Bartlett Road at Crestview Street, Engines

51-48-T22-B5 responding, (time)"

When an emergency unit is dispatched over the air with another piece of equipment, and no acknowledgment is received, the dispatcher must assume the unit personnel are on their portable radios and have been "Regrouped". The dispatcher must verify through the CAD system which fireground channel they have regrouped to and attempt to raise the unit to switch back to talkgroup "EMS1" for a run.

DISREGARDING COMPANIES BY RADIO

The FIRE Radio operator will disregard companies by radio as needed, using the following procedures:

Disregard - Only One Company Still In Route

If only one company is still in route, the FIRE Radio operator will acknowledge the disregard, and call the number of the company that is still responding, and advise the disregard.

EXAMPLE: Command: "Lamar command, disregard other companies"

FIRE1 Oper: "Check Lamar command, Engine 12 disregard the call"

Engine 12: "Engine 12 disregard"

FIRE1 Oper: "(time)"

Disregard - More Than One Company Still In Route

If more than one company is still in route, the FIRE Radio operator will acknowledge the disregard and say "companies responding to (address), disregard the call" and call the numbers of the responding companies individually.

EXAMPLE: Command: "Poplar command, disregard other companies"

FIRE1 Oper: "Check Poplar command, companies responding to 201 Poplar

Avenue, disregard the call, Engine 9?

Engine 9: "Engine 9 disregard"

FIRE1 Oper: "Battalion 1?"

Batt. 2: "Battalion 1 disregard"

FIRE1 Oper: "(time)"

REPEAT BY RADIO OF INFORMATION FROM THE SCENE

The FIRE Radio operator will repeat certain information reported from the scene. The following will be repeated:

1. **USE OF HOSE, ETC**. When a company or command reports that a pump can, booster, preconnect, or layout is being used, it will be repeated by the FIRE Radio operator.

EXAMPLE: Eng.16: "Engine 16 scene, booster, auto"

FIRE1 Oper: "Check Engine 16, booster, (time)"

EXAMPLE: Command: "Park command, Engine 30 has a preconnect laid"

FIRE1 Oper: "Check Park command, Engine 30 a preconnect, (time)"

EXAMPLE: Eng. 38: "Engine 38, we have two lines laid into T24"

FIRE1 Oper: "Check Engine 38, two lines laid into T24, (time)"

2. **REPORT OF FIRE UNDER CONTROL AND FIRE KNOCKDOWN**. When a company or command reports that a fire is under control or knocked down, it will be repeated by the FIRE Radio operator.

EXAMPLE: Command: "Summer command, fire under control"

FIRE1 Oper: "Check Summer command, fire under control, (time)"

3. **UPGRADING OF ALARM LEVEL**. When a incident commander requests a higher alarm level, it will be repeated by the FIRE Radio operator.

EXAMPLE: Command: "Mallory command, give me a second alarm"

FIRE1 Oper: "Check Mallory command, a second alarm fire, Mapco

Petroleum, 543 West Mallory Avenue at Cow Island Road,

(time)"

Repeat By Radio Of Information From The Scene Continued

4. **REPORTING IN SERVICE FROM AN INCIDENT**. When a company, emergency unit, or officer reports in service from an incident, it will be repeated by the radio operator.

EXAMPLE: Batt. 1: "Main Street command, everything coming in except Truck

5. Battalion 1 in service"

FIRE1 Oper: "Check Main Street command, Battalion 1 in service, (time)"

When a company, emergency unit, or officer reports in service from a status other than being assigned to an incident, the radio operator will answer with "check", the radio number, and the time.

EXAMPLE: 300: "300 in service"

EMS1 Oper: "Check 300, (time)"

EXAMPLE: EU5: "Unit 5 leaving Apparatus Maintenance, in service"

EMS1 Oper: "Check Unit 5, (time)"

RADIO BROADCAST OF TIME / STATION IDENTIFICATION

Radio operators will give the following time and station identification every fifteen minutes, beginning at midnight on consoles associated with the new 800 trunked radio system (not vocalarm system). The correct procedure is listed below. The words "hours" and "minutes" are not to be used.

EXAMPLE: 2400 WPAJ881 015 WPAJ881 030 WPAJ881 045 WPAJ881 100 WPAJ881 115 WPAJ881 130 WPAJ881 145 WPAJ881

Station identification is not to be broadcast on the minute before the designated time, such as 2359, 014, 029, 044, etc.

When radio Operators are extremely busy they may forego the requirement of announcement the time after every transmission.

If an Operator <u>wishes</u> to give a time break and station identification on the <u>Vocalarm radio</u> <u>system</u>, the correct procedure and station identification is listed. Use caution if you give a time break, not to give immediately after dispatching companies since their microphone may be off the holder and they would receive this and possible confuse them.

EXAMPLE: 2400 WNRM943 015 WNRM943 030 WNRM943 045 WNRM943 100 WNRM943 115 WNRM943 130 WNRM943 145 WNRM943

RADIO TALKGROUPS LAYOUT CHART

Most Fire mobile and portable radios are equipped with 77 talkgroups. The following chart shows Talkgroups for a lower tiered radio.

Z O N E	SELECTOR	F - R E	ZONE	S E L E C T O R	G R F O I U R N E D	ZONE	SELECTOR	G R F O I U R N E D	Z O N E	SELECTOR	E M S	ZONE	SELECTOR	E - R O O M S	Z O N E	SELECTOR	T R S A U I P N P I O N R G T	ZONE	SELECTOR	A I G N E T N E C R	ZONE	SELECTOR	B A C K U P
Α	1	FIRE1	В	1	FIRE1	С	1	FIRE1	D	1	EMS 1	Ε	1	EMS 1	F	1	FIRE1	G	1	FIRE1	Р	1	EMRG
Α	2	FIRE2	В	2	FIRE2	С	2	FIRE2	D	2	EMS 2	Ε	2	BAPTC	F	2	FIRE2	G	2	EMS 1	Р	2	EMRG
Α	3	EMS 1	В	3	EMS 1	С	3	EMS 1	D	3	FIRE1	Ε	3	BAPTE	F	3	EMS 1	G	3	FDNET	Р	3	EMRG
Α	4	EMS 2	В	4	EMS 2	С	4	EMS 2	D	4	FIRE2	Ε	4	CRUMP	F	4	EMS 2	G	4	PDNET	Р	4	EMRG
Α	5	OPS1	В	5	GRD6	С	5	GRD15	D	5	EMGRD	Ε	5	EWOOD	F	5	ARSON	G	5	SYNET	Р	5	EMRG
Α	6	OPS2	В	6	GRD7	С	6	GRD16	D	6	GRD24	Ε	6	LBOHN	F	6	INSPC	G	6	NPSP1	Р	6	EMRG
Α	7	OPS3	В	7	GRD8	С	7	GRD17	D	7	GRD25	Ε	7	MED-B	F	7	SPEV1	G	7	NPSP2	Р	7	EMRG
Α	8	OPS4	В	8	GRD9	С	8	GRD18	D	8	GRD26	Ε	8	MED-M	F	8	SHOP	G	8	NPSP3	Р	8	EMRG
Α	9	GRD1	В	9	GRD10	С	9	GRD19	D	9	GRD27	Ε	9	MED-T	F	9	TRN 1	G	9	NPSP4	Р	9	EMRG
Α	10	GRD2	В	10	GRD11	С	10	GRD20	D	10	GRD28	Ε	10	METHC	F	10	TRN 2	G	10	NPSP5	Р	10	EMRG
Α	11	GRD3	В	11	GRD12	С	11	GRD21	D	11	GRD29	Ε	11	METHN	F	11	TRN 3	G	11	MLGW1	Р	11	EMRG
Α	12	GRD4	В	12	GRD13	С	12	GRD22	D	12	GRD30	Ε	12	METHS	F	12	TRN 4	G	12	MLGW2	Р	12	EMRG
Α	13	GRD5	В	13	GRD14	С	13	GRD23	D	13	EMA	Ε	13	STFRN	F	13		G	13	MLGW3	Р	13	EMRG
Α	14	VOCAL	В	14	VOCAL	С	14	VOCAL	D	14	VOCAL	Ε	14	STJOE	F	14	VOCAL	G	14	MLGW4	Р	14	EMRG
Α	15	CTC	В	15	CTC	С	15	CTC	D	15	CTC	Ε	15	VA	F	15	CTC	G	15	HPNET	Р	15	EMRG
Α	16	REGRP	В	16	REGRP	С	16	REGRP	D	16	REGRP	Ε	16	REGRP	F	16	REGRP	G	16	REGRP	Р	16	REGRP

RADIO TALKGROUPS LAYOUT CHART

Most Fire Division mobile and portable radios are programmed with 77 talkgroups. The following chart shows a program for the upper tiered radio with 151 Talkgroups.

		F I R E	Z O N E	_	G R O U N D	Z O N E	SELECTOR	G R O U N D	Z O N E	SELECTOR	E M S	Z O N E	SELECTOR	E - R O O M S	ZONE	SELECTOR	T	Z O N E	SELECTOR	A I G N E T N E C R Y	Z O N E	SELECTOR	M P D	Z O N E	S E L E C T O R	B A C K U P
Δ	1	FIRE1	В	1	FIRE1	C	1	FIRE1	D	1	EMS 1	F	1	EMS 1	F	1	FIRE1	G	1	FIRE1	Н	1	FIRE1	Р	1	EMRG
		FIRE2	В		FIRE2			FIRE2			EMS 2			BAPTC			FIRE2			EMS 1			EMS 1	P	2	EMRG
Α	3	EMS 1	В		EMS 1	С	3	EMS 1	D	3	FIRE1	Ε	3	BAPTE	F	3	EMS 1			FDNET	Н	3	PD-NO	Р		EMRG
Α	4	EMS 2	В	4	EMS 2	С	4	EMS 2	D	4	FIRE2	Ε	4	CRUMP	F	4	EMS 2	G	4	PDNET	Н	4	PD-SO	Р	4	EMRG
Α	5	OPS1	В	5	GRD6	С	5	GRD15	D	5	EMGRD	Ε	5	EWOOD	F	5	ARSON	G	5	SYNET	Н	5	PD-ES	Р	5	EMRG
Α	6	OPS2	В	6	GRD7	С	6	GRD16	D	6	GRD24	Ε	6	LBOHN	F	6	INSPC	G	6	NPSP1	Н	6	PD-WE	Р	6	EMRG
Α	7	OPS3	В	7	GRD8	С	7	GRD17	D	7	GRD25	Ε	7	MED-B	F	7	SPEV1	G	7	NPSP2	Н	7	PD-CE	Р	7	EMRG
Α	8	OPS4	В	8	GRD9	С	8	GRD18	D	8	GRD26	Ε	8	MED-M	F	8	SHOP	G	8	NPSP3	Н	8	PD-DT	Р	8	EMRG
Α	9	GRD1	В	9	GRD10	С	9	GRD19	D	9	GRD27	Ε	9	MED-T	F	9	TRN_1	G	9	NPSP4	Н	9	PD-CO	Р	9	EMRG
Α	10	GRD2	В	10	GRD11	С	10	GRD20	D	10	GRD28	Ε	10	METHC	F	10	TRN 2	G	10	NPSP5	Н	10	PDSTB	Р	10	EMRG
Α	11	GRD3	В	11	GRD12	С	11	GRD21	D	11	GRD29	Ε	11	METHN	F	11	TRN 3	G	11	MLGW1	н	11	PD-CW	Р	11	EMRG
Α	12	GRD4	В	12	GRD13	С	12	GRD22	D	12	GRD30	Ε	12	METHS	F	12	TRN 4	G	12	MLGW2	Н	12	PDTAC	Р	12	EMRG
Α	13	GRD5	В	13	GRD14	С	13	GRD23	D	13	EMA	Ε	13	STFRN	F	13		G	13	MLGW3	Н	13		Р	13	EMRG
Α	14	VOCAL	В	14	VOCAL	С	14	VOCAL	D	14	VOCAL	Ε	14	STJOE	F	14	VOCAL	G	14	MLGW4	Н	14		Р	14	EMRG
Α	15	CTC	В	15	CTC	С	15	CTC	D	15	CTC	Ε	15	VA	F	15	CTC	G	15	(HPNET)	Н	15		Р	15	EMRG
Α	16	REGRP	В	16	REGRP	С	16	REGRP	D	16	REGRP	Ε	16	HPNET	F	16	REGRP	G	16	REGRP	Н	16	REGRP	Р	16	REGRP

RADIO TALKGROUPS DESIGNATED USE

Continued

FIRE1 - Utilized as the primary communications talkgroup between FIRE COMMUNICATIONS and all fire suppression personnel. All fire calls are broadcast over this frequency. The "FIRE1" talkgroup is the same talkgroup in Zone "A" to Zone "G" (also Zone H if radio is so equipped).

FIRE2 - Utilized as an additional fire dispatch channel during Multiple alarms, Alert three's, Mass Casualty situations etc. May also be used as a PRIMARY CHANNEL for Haz-Mat entry situations. The "FIRE2" talkgroup is the same talkgroup in Zones "A, B, C, & D". "FIRE2" does not appear in Zones "E or G".

GRD1 to GRD30 - Utilized as fireground operation talkgroups. These 30 Fireground talkgroups are all recorded at Fire Communications for reporting, time stamping events that occur on the scene of an Incident and for critiquing the incident. These 30 talkgroups appear in Zones "A, B, C & D". Anytime more than one piece of fire and/or Emergency Unit equipment is assigned to a run from the CAD system in fire dispatch, the CAD system tells the Motorola radio system to automatically regroup all the portables assigned to personnel on these pieces of equipment to one of the 30 fireground talkgroup channels. This means when more than one piece of equipment is responding to and advises scene, they will advise on their mobile radio as done in the past. When fire fighters and/or paramedic/fire fighters exit the apparatus they will not have to switch their radios to a fireground channel. The portable radios will already be on one of the thirty fireground channels. When the Officer or Incident Commander needs to communicate back to the dispatcher they will rotate the talkgroup selector knob to #16 "REGRP" and then the talkgroup selector knob to #1 "FIRE1" and talk to the fire radio dispatcher ("FIRE1"). For the Officer or Incident Commander to rejoin the fireground talkgroup their fire is being worked on, simply switch the talkgroup selector knob back to #16 "REGRP" (the regroup talkgroup). An advantage to this method is a company responding may monitor the fireground talkgroup after being assigned, and others say in an engine house may monitor fireground radio activity by the radios talkgroup to the proper fireground talkgroup the incident is being worked on.

(A5-A8) OPS1 to OPS4 - These are set aside as Operational Talkgroups. The Incident Command has these talkgroups to use to the best of his advantage. The "A5 OPS1" talkgroup is used during Mass Casualties/Alert Three's at Memphis International Airport. Another example would be a disaster over a large area such as a tornado destroying several city blocks. The Incident Commander may assign a Task Force to a specific mission in a certain area of the destruction and order them to carry out their assignment on talkgroup "A6 OPS2". The Incident Commander could then get in touch with this Task Force at any time on talkgroup "A6 OPS2". This just gives the department much more flexibility than we have had in the past.

RADIO FREQUENCIES DESIGNATED USE

Continued

EMS1 - utilized as the primary communications talkgroup between FIRE COMMUNICATIONS and all EMS Units. All emergency Unit calls are broadcast over this talkgroup. The "EMS1" talkgroup is the same talkgroup in Zone "A" to Zone "G" (also Zone H if radio is so equipped).

EMS2 - Utilized as an additional EMS dispatch talkgroup between EMS Units and Fire Communications. The "EMS2" talkgroup is the same talkgroup in Zone "A" to Zone "F" (also Zone H if radio is so equipped). The "EMS2" talkgroup is the same talkgroup in Zones "A, B, C, D, & F". "FIRE2" does not appear in Zones "E, G. (or Zone H if radio is so equipped).

(D5) EMGRD - EMS Ground is another talkgroup that can be utilized by EMS personnel on the scene of large scale events. This just gives some flexibility if EMS1 and EMS2 are being used as PRIMARY CHANNELS. The "EMGRD" talkgroup only appears in Zone "D5".

CTC - The car-to-car channel is used for car-to-car radio traffic that is lengthy or inappropriate for FIRE1 or EMS1 channels. The CTC channel is the same channel from zone to zone. The "CTC" talkgroup is the same talkgroup in Zones "A, B, C, & D". "CTC" does not appear in Zones "E, & G. (or Zone H if radio is so equipped).

ZONE E, HOSPITALS - Zone E is utilized by Paramedics in the field to communicate with the hospital emergency rooms. The hospitals are equipped with Fire Department radios and communications will involve relaying patient information and obtaining medical orders from a doctor. Paramedics simple switch to the talkgroup (channel) of the hospital they wish to talk to and raise the hospital. Hospitals are listed in alphabetical order within Zone "E". If the talkgroup (channel) is busy, a paramedic can utilize the telephone interconnect and select the specific hospital fire phone number which have been pre-programmed into the radios. Also Zone "G15 HPNET" is designated as a hospital net channel. This is an additional talkgroup that can be utilized in emergency situations. A possible scenario would be having multiple hospitals go to "G15 HPNET" for special instructions on a disaster type situation etc. "G15" was the only position available for this channel. It was originally in Zone "E" position #16 but had to be relocated due to the necessity of having a REGROUP channel within this particular zone and talkgroup position.

CAD COMMANDS ASSOCIATED WITH REGROUPING OF PORTABLE RADIOS

The following are two new CAD colon commands that are associated with the automated CAD function of regrouping portable radios when more than one piece of apparatus is assigned to an incident.

:RG, 13

The above CAD colon command will Regroup all the portables radios used by personnel on Engine 13 to one of the 30 fire "GRD" talkgroups.

:XR, 13

The above CAD colon command will Un-Regroup all the portable radios that have been regrouped.

DOWN CAD SYSTEM AND REGROUPING OF PORTABLE RADIOS

If the CAD system fails or goes down, the Vocalarm Operator will be required to manually keep up with which fireground talkgroups are assigned to full assignments that are dispatched and broadcast this information to the responding companies. Think of the fireground as a piece of equipment. You should also notify responding companies that the CAD system is down and regrouping of their portable radios will not automatically be done.

Example: **Vocal:** Report of a kitchen on fire at 1019 N. Avalon near S. Michelle Circle. Engine 28, 19, T6 and B4 respond. Your fireground Talkgroup is "A11 Ground 3".

Report of a kitchen on fire at 1019 N. Avalon near S. Michelle Circle. Engine 28, 19, T6 and B4 respond. Your fireground Talkgroup is "A11 Ground 3".

Remember this is only when the CAD system is down!

PUSH TO TALK (PTT) RADIO ID'S

Whenever a Push To Talk (PTT) transmit button is pressed on all Fire Department radio's a Push To Talk Identifier is also transmitted to Fire Communications. This Identifier is displayed in two ways. If a radio is transmitting and the Talkgroup is in a "Active CCW" on the radio screen, the radio ID is displayed in the CCW.

A Fire Department radio that is transmitting on any Talkgroup no matter if the Talkgroup is in an "Active CCW" or not will display the alias for the radio as E13, Tr22. The radio alias will display on the bottom of the "Incident Monitor" screen. The alias will scroll from left to right on the bottom line of the screen.

800 MHz RADIO - EMERGENCY BUTTON, DECLARING AN EMERGENCY & RESETTING AN EMERGENCY

The 800 MHz radios are equipped with an "EMERGENCY" button that when engaged will signal every fire dispatch radio console in Fire Communications that an emergency has been declared by a radio user. This action should only be taken in life threatening situations.

This action should not be taken for routine emergencies such as when passing a wreck on the street, or when the radio user can talk to the dispatcher and inform them of an emergency. If a user can transmit to us and advise us the situation, this is still the fastest and quickest method. One must remember that Fire Communications will see the radio ID of the radio that declared the emergency, will be able to tell what company, and the position the radio is assigned to on that company and if that radio is on the scene of an incident or not. It will not tell us "What The Emergency Is" or "Exactly Where The Person is Located"! This is a last resort method, or maybe the only way a radio user might be able to let Fire Communications know they have an emergency due to physical impairments and/or injuries.

Declaring an "EMERGENCY": (Radio User)

When a user operator presses down firmly and holds the "Emergency Button" for about a ½ second the radio will beep to acknowledge your emergency request, and the portable radio will flash "EMERGENCY" on the LCD display window, until the radio is reset by the radio user. After declaring an emergency the radio user should communicate with Fire Communications and advise what the emergency is, if possible. If this is not possible (trapped, passed out etc.), Fire Communications will attempt to raise the user of the radio that declared the emergency to find out any details. Fire Communications will see the radio ID of the radio that declared the emergency, will be able to tell what company, and the position the radio is assigned to on that company, and if that radio is on the scene of an incident or not. If this is an incident that is working, Fire Communications will contact the Incident Commander, and advise that an "EMERGENCY" was declared by such the company number and position.

Resetting an "EMERGENCY": (Radio User)

The radio user has to firmly press the emergency button and hold down for approximately 3 seconds until a steady tone is given and then the radio will reset and discontinue flashing "EMERGENCY". While the radio is flashing "EMERGENCY" the user may still receive and transmit.

800 MHz RADIO - Emergency Button, Declaring An Emergency & Resetting An Emergency

Continued

Reacting to a Declared "EMERGENCY": (Fire Communications Dispatchers)

When an "EMERGENCY" is declared by a radio user, Fire Communications dispatchers will receive the following message, on the CAD Work Terminal, in various locations on the screen depending what screen you are on at the time the emergency is declared. The CAD will display the following message with white characters on a red background on the CAD Work Terminal:

***** EMERGENCY ***** EN2L

The CAD will also activate a message that will display the green "message waiting bar" at the bottom of the CAD Work Terminal. The Radio Dispatcher should then do a ":DM" to display the message, and the information pertaining to the declared emergency will be display. The message concerning the emergency will read:

Emergency BUTTON by EN2L

At the same time an "EMERGENCY" tone will be activated at each Fire Dispatch console. Also if the Channel Control Window (CCW) is "Active" (displayed on the Motorola Radio screen) the CCW will be outlined with a flashing red border.

If a radio user declares an emergency and the emergency tone is activated at each console but no "Active" CCW is outlined with a flashing red border, this indicates the emergency has been declared on a talkgroup that you do not have "Active" (displayed on the Motorola Radio screen). The Dispatcher will have to look at the Motorola Radio screen in the "Status Area" located in the bottom right hand corner. If you look in the "Status Area" it will display "Lst" which indicates the dispatcher must look in the "Select List" that is listed along the right side of the screen. This will display emergency, what talkgroup the "EMERGENCY" was declared on and the name of the talkgroup. The "Status Area" will display it as follows:

EMERG: A10 GRD2 @ Lst

EMERG ID: A 720360

800 MHz RADIO - Emergency Button, Declaring An Emergency & Resetting An Emergency

Continued

At this point the Dispatcher knows what talkgroup the "EMERGENCY" was declared on (A10) the talkgroup name (GRD2) and they must look in the "Select List" since the "Lst" showed in the "Status Area" and none of their "Active" CCWs have a red flashing border around them. The Dispatcher has to scroll the "Select List" that is listed along the right side of the screen using the up & down arrows to find the talkgroup GRD2 which will be displayed with white characters on a flashing red background. Place the mouse cursor on this talkgroup and click on this talkgroup using the left mouse button. Transmit to the user who declared the "EMERGENCY" using the middle mouse button from anywhere on the screen or use the foot pedal.

Reacting to a Declared "EMERGENCY": (Fire Communications Dispatchers)Continued

The Dispatcher can silence the alarm and clear it by use of the "Emergency Reset Window" and selecting "clear sts". Keep in mind that if the radio user did not reset their emergency declaration on the radio, and the dispatcher performed a "clear sts" and the radio user transmits again, this will automatically activate the "EMERGENCY" button alarm again. When one Radio Dispatcher silences the "EMEREGCY" alarm it will silence the alarm on all dispatch positions.

After the dispatcher performs a "clear sts", they will have to re-select their Primary talkgroups in the CCW on the Motorola Radio screen.

CREATING AN EMERGENCY TALKGROUP DEDICATING A RADIO CHANNEL TO A TALKGROUP -

Purpose: To allow Dispatchers to establish a radio channel for exclusive use by a particular talkgroup.

In rare cases dispatchers may need to dedicate a radio channel to one particular "Talkgroup". An example of this may be a large scale air crash incident when the Fire Division side of the radio system is extremely busy. Included would be other City Divisions who are assigned to the Fire Division side of the radio system that would also become very busy during large citywide incidents.

During large scale incidents such as an air crash, a situation could exist where a radio user attempts to transmit and none of the 14 radio channels are available and the radio user is put into a que. The dispatcher has the ability to create / declare an "Emergency Talkgroup". The dispatcher would perform the following steps to accomplish this.

To Establish An Emergency Talkgroup:

- 1. Select the CCW.
- 2. Select the Menu Function "Special" displayed across the bottom of the main radio console display screen.
- 3. Use the mouse and select the "Emerg Set-up" button. (Emerg Set-up will be displayed in the "Status Area" of the main radio console display screen.)
- 4. The dispatcher has approximately 10 seconds to put the mouse cursor in the "Channel Control Window" (CCW) and click with the left mouse button.

To Knockdown an Emergency Talkgroup:

- 1. Select the Menu Function "Special" displayed across the bottom of the main radio console display screen.
- 2. Use the mouse and select the "Emerg Reset" button.
- 3. Use the mouse and select the "Knockdown" button.
- 4. Put the mouse cursor in the CCW of the talkgroup that was setup as an emergency talkgroup click the left mouse button.

Radios that have the Talkgroup selected where the emrgency talkgroup was selected will display in their displays "EMER RECEIVED". They can still transmit and receive.

FAILSOFT MODE - 800 TRUNKED RADIO SYSTEM

If the 800 Trunked radio system were to have a major component fail, the radio system could stop "Trunking" and possible go into "Site Trunking". As a last resort the various talkgroups (channels) have been preprogrammed to revert (Failsoft) back to certain radio frequencies. The Fire system has 15 radio frequencies associated with it and the following talkgroups fail back to these channels.

To simplify this, look at the charts on the next several pages. All personnel on the talkgroups listed in the second set of numbers labeled 1 through 12 revert back to one Failsoft Frequency. This means when we go into a Failsoft condition all of the radios on any of the listed talkgroups in the second set labeled 1 through 12 revert back to a one channel operations. These are all the talkgroups that would make up one "FIRE" channel similar to the old "F5" radio channel.

Each set of talkgroups listed go to a single radio frequency in the Failsoft mode.

When a failsoft condition exist, the radio console operator must notice this by observing the Mobile Backup Radio that is mounted in each radio dispatch console. The Spectra Display will show "FAILSOFT" in the display window every 10 seconds and beep. The purpose of having these radios is for use under these conditions. The radio dispatcher will plug the headset jack into the mobile backup radio headset jack and utilize the small foot pedal to transmit. The mobile backup radio must have the channel set on the Talkgroup they are working.

Fire Fighters and EMS personnel will also notice the word "Failsoft" displayed on their radios and a beeping tone. Under this mode of operation you may still transmit back to Fire Communications. You may notice other personnel that normally do not operate on your radio talkgroup, talking and carrying on business. This is due to the sharing of the 15 radio frequencies under these conditions instead of the many talkgroups that we have when the radio system is "Trunking" and operating normally. In essence each radio talkgroup "fails back to" a predefined radio frequency.

Main Dispatch Function	Backup Mobile Radio set
	to Talkgroup
Fire Radio Console	FIRE1
EMS Radio Console	EMS 1

FAILSOFT MODE - 800 TRUNKED RADIO SYSTEM

Continued

	Talkgroup	Channel	Failsoft	Personality	Personality	Personality
	Name		Frequency	EMS	Supervisory	
01.	FIRE2	FD7	856.7125	FIRE2	FIRE2	FIRE2
01.	FIRE1	FD6	857.7125	FIRE1	FIRE1	FIRE1
02.	OPS1	FD6	857.7125	OPS1		OPS1
03.	OPS2	FD6	857.7125	OPS2		OPS2
04.	OPS3	FD6	857.7125	OPS3		OPS3
05.	OPS4	FD6	857.7125	OPS4		OPS4
06.	ARSON	FD6	857.7125			ARSON
07.	INSPC	FD6	857.7125	INSPC	INSPC	
08.	SPEV1	FD6	857.7125	SPEV1	SPEV1	
09.	FTRN1	FD6	857.7125	FTRN1		
10.	FTRN2	FD6	857.7125	FTRN2		
11.	FTRN3	FD6	857.7125	FTRN3		
12.	FTRN4	FD6	857.7125	FTRN4		
01.	GRD1	FD10	857.9375	GRD1		GRD1
02.	GRD2	FD10	857.9375	GRD2		GRD2
03	GRD3	FD10	857.9375	GRD3		GRD3
04.	GRD4	FD10	857.9375	GRD4		GRD4
05.	GRD5	FD10	857.9375	GRD5		GRD5
06.	GRD6	FD10	857.9375	GRD6		GRD6
07.	GRD7	FD10	857.9375	GRD7		GRD7
08.	GRD8	FD10	857.9375	GRD8		GRD8
09.	GRD9	FD10	857.9375	GRD9		GRD9
10.	GRD10	FD10	857.9375	GRD10		GRD10
11.	GRD11	FD10	857.9375	GRD11		GRD11
12.	GRD12	FD10	857.9375	GRD12		GRD12
13.	GRD13	FD10	857.9375	GRD13		GRD13
14.	GRD14	FD10	857.9375	GRD14		GRD14
15.	C-2-C	FD10	857.9375	C-2-C	C-2-C	C-2-C
16.	SHOP	FD10	857.9375	SHOP		

FAILSOFT MODE - 800 TRUNKED RADIO SYSTEM

Continued

01.	GRD15	FD11	856.9375	GRD15		GRD15
02.	GRD16	FD11	856.9375	GRD16		GRD16
03.	GRD17	FD11	856.9375	GRD17		GRD17
04.	GRD18	FD11	856.9375	GRD18		GRD18
05.	GRD19	FD11	856.9375	GRD19		GRD19
06.	GRD20	FD11	856.9375	GRD20		GRD20
07.	GRD21	FD11	856.9375	GRD21		GRD21
08.	GRD22	FD11	856.9375	GRD22		GRD22
09.	GRD23	FD11	856.9375	GRD23		GRD23
10.	GRD24	FD11	856.9375	GRD24		GRD24
11.	GRD25	FD11	856.9375	GRD25		GRD25
12.	GRD26	FD11	856.9375	GRD26		GRD26
13.	GRD27	FD11	856.9375	GRD27		GRD27
14.	GRD28	FD11	856.9375	GRD28		GRD28
15.	GRD29	FD11	856.9375	GRD29		GRD29
16.	GRD30	FD11	856.9375	GRD30		GRD30
01.	FDNET	FD5	858.7125			
02.	SYNET	FD5	858.7125			
01.	EMS2	FD9	858.9375			
01.	BAPTC	FD12	859.9625			
02.	BAPTE	FD12	859.9625			
03.	CRUMP	FD12	859.9625			
04.	EWOOD	FD12	859.9625			
05.	LBOHN	FD12	859.9625			
06.	MED-B	FD12	859.9625			
07.	MED-M	FD12	859.9625			
08.	MED-T	FD12	859.9625			
09.	METHN	FD12	859.9625		METHN	
10.	METHS	FD12	859.9625		METHS	
11.	STFRN	FD12	859.9625		STFRN	
12.	STJOE	FD12	859.9625		STJOE	
13.	VA	FD12	859.9625		VA	
14.	HPNET	FD12	859.9625		HPNET	
01.	EMS 1	FD8	859.9375			
02.	EMSGRD	FD8	859.9375			

FAILSOFT MODE - 800 TRUNKED RADIO SYSTEM

Continued

01.	F-ADM	FD1	860.7125		F-ADM
02.	STMNT	FD1	860.7125		
04.	BLVUE	FD3	860.9375		
05.	BRKS	FD3	860.9375		
06.	CCNTL	FD3	860.9375		
07.	DEMOC	FD3	860.9375		
08.	EMSVC	FD3	860.9375		
09.	MTOWN	FD3	860.9375		
10.	SCOTT	FD3	860.9375		
11.	SVFEE	FD3	860.9375		
12.	SWADM	FD3	860.9375		
13.	EVADM	FD4	860.9625		
14.	FLOOD	FD4	860.9625		
15.	MAINT	FD4	860.9625		

ENTERING RADIO ID'S INTO THE CAD SYSTEM

To enter Radio ID's into the CAD system the computer user must have a password that will allow them to proceed to the "Equipment Maintenance" file.

The user will enter a .EM and send.

If you enter Engine 1, at the bottom of the screen you are allowed to enter six radio ID's that are assigned to Engine 1.

Radio ID's are six digits long and every ID begins with the number 7. You are only required to enter the 1st 5 digits of the ID's. An example would be radio ID 720315 would be entered as 20315.

Hitting the F4 button updates the record as always.

Enable And Disable Link Between CAD And Radio System

If it becomes apparent that the automatic regrouping function for the radio system is not working or not working correctly, use the following procedure. Go to the shift/F2 screen and disable line 90 by entering :DS 90. Then wait about a minute and enable line 90 by entering :EN 90. This should bring the line between the CAD system and the radio system back up. You can tell if the CAD is sending regrouping signals by looking at the systems watch terminal (in front of the wall map). Anytime a regrouping signal is sent, a yellow line should appear on the screen.

Procedure For Swapping Out a Portable Radio

- 1. Take a portable radio from the radio cabinet. The ruggedized and upper tier radios will be in a box on the middle shelf. Lower tier radios will be in a box on the bottom shelf.
- 2. Write down the asset number and ID number of the radio you are issuing and leave those numbers along with the bad radio on the Administrative Watch Commander's desk.
- 3. In CAD go to the equipment maintenance screen (.EM). At the bottom right part of the screen, replace the bad radio's ID number with the issued radio's ID number. This will allow the issued radio to regroup.
- 4. The alias needs to be changed in the System Manager. To change the alias, sign on to the System Manager. The name is fcb and the password is fcb.
 - a) Click on the button marked Smart Zone Manager and wait for the screen to change and the alarm icons to appear at the top left of the screen.
 - b) Click on the radio user button, then open.
 - c) Click on Radio User Alias line and enter the alias of the radio you received (ex. T16IM), then click on search.
 - d) When the screen comes back, click on the top line and change the alias to the radio id number and click on save, and close.
 - e) Click on radio user again and then open.
 - f) Click on the top line and enter the id number you issued, then search.
 - g) When the screen comes back, click on the top line and change the id number to the alias and then save, and close.

800 MHz RADIO DISPATCH CONSOLES

While the Fire Division is converting over to the new 800MHz radio system the following procedure is required when answering a co-workers radio console in time of their absence. This allows your transmissions to be heard over the old UHF "F3" and the new 800 MHz "EMS 1" channel.

NORMAL OPERATIONS:

- 1. The Multi-Sel window should be left display at all times.
- 2. The MSel display within the Multi-Sel window, should already have the old and new talkgroup setup in it. An example would be a <u>fire console</u> shows MSel 1, "Fire F5" and "A1 FIRE1" selected, an ems console shows MSel 1, "Fire F3" and "A3 EMS 1".
- 3. For a Fire dispatch console the normal position would be to have the MSel 1 selected which is indicated by the MSel 1 back-lit in Green. When this is indicated the Channel Control Window (CCW) will show the "Fire F5" CCW and the "A1 FIRE1" CCW with a green background.
- 4. For an EMS dispatch console the normal position would be to have the MSel 1 selected which will backlight the MSel with a green colored background. When this is indicated the CCW will show the "F3" CCW and the "EMS 1" CCW with a green background.
- 5. When items 3 and 4 are set for your particular console, the receive audio is heard in your headset, and all transmissions should be made utilizing the foot pedal.

To Monitor & Transmit on Another Radio Console:

- 1. Turn up the un-select speaker audio:
- 2. Adjust the volume in the CCWs that you are monitoring by placing the mouse cursor on the volume wedge, and clicking the left mouse button to the left of the number to lower volume, or clicking the left mouse button to the right of the number to raise the volume level.
- 3. When you here audio coming from the unselect audio speaker on your console and it is being received, you must know what talkgroups are contained in each of the three MSel buttons to know what "APB" (All Points Bulletin) to transmit on.

Examples: An EMS console has the old "F3" CCW and the new "EMS 1" CCW selected as in normal everyday operations. The EMS console needs to

monitor the FIRE console. Follow the next procedure:

800 MHz RADIO DISPATCH CONSOLES

Continued

4. When traffic is heard from the "F5" or "FIRE1" CCWs place the mouse cursor over the box labeled "APB 2" and transmit using the left mouse button. When transmitting the "APB" box will turn red and a red x-mit light displays in both the "F5" and "FIRE1" CCWs. This allows your transmissions to be heard over both old UHF "F3" and the new 800MHz "EMS 1" channel.

This same procedure is used when a FIRE console needs to monitor an EMS console. The setups for the MSel 1 and MSel 2 are reversed in a FIRE console.

After Installations Are Complete, and All Personnel Are On The 800 MHz System:

To Monitor Another Radio Console:

- 1. Turn up the unselect audio speaker.
- 2. Adjust the volume level for the CCW you are monitoring.
- 3. Place the mouse cursor in any of the top three lines of the CCW you want to transmit on and press the right mouse button to transmit.

EXPANDING CCWs ON THE 800 MHz RADIO DISPATCH CONSOLES

To expand a Channel Control Window (CCW) to double size:

Place the mouse cursor in the "Display" box shown across the bottom of the screen. Click the left mouse button. Click on the "Show/Hide Options" button. Place the mouse cursor in the CCW that you want to expand and click the mouse button. This will double the size of the CCW and display either "Main" or "Stby" Repeater status on the old radio system channels. On the new radio system talkgroups it will display "Rpt DIS" or "Rpt. Enable" status.

To restore the Channel Control Window (CCW) to half size:

- 1. If the Show/Hide window is still displayed and the resize displays <u>enabled</u>: place the mouse cursor in the top three lines of the CCW to resize and click the left mouse button.
- 2. If enable is not displayed and <u>disabled</u> is shown, click on Resize to re-enable. Place the mouse cursor in the three top lines of the CCW to resize and click the left mouse button.
- 3. Hit Quit to return to a normal display screen.

CONFIRMATION OF FIREGROUND COMMAND

The Incident Command System will be used at all multi-company fire department and medical emergencies, except first responder calls. The first arriving fire fighting officer will establish and identify the command to Fire Communications. When this occurs, the FIRE Radio operator will repeat the identification of the command.

EXAMPLE: E17: "Engine 17 scene, one-story frame, see smoke, we have

Summer Command."

FIRE1 "Check Engine 17, Summer Command, (time)"

If the first arriving company fails to establish command, the FIRE1 Radio operator will advise them to establish command.

EXAMPLE: E17: "Engine 17 scene, one-story frame, see some smoke."

FIRE1: "Check Engine 17, establish command."

TROLLEY SYSTEM - emergency shutdown

Request To Shut Off Power To The Trolley System

Fire Communications will notify MATA on extension 5561. This will ensure that trolley cars are not blocking intersections or the building involved when the power is shut down. **The following procedures will be performed even though MATA advises the power has been already shut down**.

Shutting the power off will be accomplished by pushing two buttons, one for the North Rectifier and one for the South Rectifier. <u>Power must be shut down at both power stations or the system is still energized.</u>

North power station - 547 N. Main on the north side of Trolley Barn Building. South power station - across the street from 36 E. Calhoun (directly behind Central Station)

Note: There is only one air switch located at 547 N. Main and there are two switches located at 36 E. Calhoun, and are located side by side.

One Battalion Chief will be dispatched to 547 N. Main and One Battalion Chief dispatched to 36 E. Calhoun to manually open the air operated switches located at the top of the <u>feeder poles</u> (hot stick and gloves will be in a box mounted on feeder poles). The Battalion Chiefs should verify that the power is shutdown at Fire Communications prior to opening switches.

If Power Cannot Be Shut Down At Fire Communications

The power will have to be shut down at the North and South Rectifier power stations:

North power station - 547 N. Main on the north side of Trolley Barn Building South power station - 545 S. Main on the west side of Union Station

Both power stations are inside a security fence. A Medeco box with keys to the power station is adjacent to the gate. The access door to the rectifier and breaker to shutdown the power are clearly labeled. When the Battalion Chief has shutdown the power at the rectifier power stations, the air operated switches at the top of the feeder poles will be manually opened by the Battalion Chief as described above. After switches are opened, both Battalion Chiefs will notify Fire Communications that the catenary cables (Trolley System) is de-energized. Fire Communications must remember that the system is not completely shutdown until notified by both Battalion Chiefs.

Fire Communications will contact MLG&W to install ground chains on the air switches at both locations after the system is shut down.

Trolley System - Emergency Shutdown Continued

Lowering Of Overhead Cables

If the catenary (overhead) cable needs to be lowered, the Incident Commander will verify with Fire Communications that the power has been shut down prior to lowering the cable. (Verify that both Battalion Chiefs have opened the air switches at the top of the feeder poles and notified Fire Communications).

If The Incident Commander advised that they are going to cut the catenary (overhead cables) notify MLG&W immediately. Under no circumstances will Fire Personnel attempt to cut the cables, without supervision of MLG&W.

Kits to cut the cables are carried on Truck 2 and Truck 5. Additional kits are located at fire station 1 and fire station 2.

TROLLEY SYSTEM - DAILY TESTING

Fire Communications will test the emergency shutdown for the downtown Trolley system daily at 0800 hours. Fire Communications Operators will engage both cutoffs for the north power station and the south power station.

The visual lights should indicate an "OPEN CIRCUIT" by the "GREEN" light illuminating. When you have a "CLOSED CIRCUIT" the "RED" light will illuminate. Remember a "GREEN" light indicates an OPEN CIRCUIT which means no power or safety.

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UTILIZING PRIVATE AMBULANCE SERVICE AS BACKUP

In the event that there are no emergency units left in service in the city, and additional emergency calls are received, first attempt to return an MFD emergency unit to service. If unable to return a unit to service, Fire Communications will contact a private ambulance service and request they dispatch a unit. In addition, Fire Communications will dispatch a first responder company to the scene. On calls involving a violent nature such as a wounding, the private ambulance company should be made aware of the nature of the call, and a first responder should only be dispatched to the scene where the scene is secured. The Vocalarm operator will assign the designated first responder company and also a corresponding equipment number for the private ambulance that was called to respond. This is necessary for tracking which private company is called on which incident. If the first responder disregards the private ambulance, the radio operators can verify which private company was called by recalling the incident in 'CAD'. After disregarding the private ambulance, the radio operator should in-service the equipment number used for the private ambulance that is assigned on that particular incident.

Private ambulance services will not be contacted unless all MFD units (except EU19) are unavailable.

It is permissible to contact a private ambulance when a Fire Department is on the scene and requests one for transporting purposes.

When more than one request is made rotate the request between the two private services.

Private ambulance services that can be utilized:

- 01. Rural Metro Ambulance
- 02. ASI
- 03. Emergency Mobile Health Care (EMHC)

Telephone numbers can be found under "Info-Private Ambulance" etc. in the CAD system.

Watch Commanders will note in the proper logbook, anytime that 3 or less Emergency Units remain in service in the City.

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January 5, 2000

REQUEST FOR DECONTAMINATION EQUIPMENT

Decontamination equipment is stored on the Haz-Mat Trailer. Whenever decontamination equipment ("DECON") is requested, dispatch the following:

- 1. Engine 13.
- 2. Battalion 5 if not already assigned.
- 3. Emergency Unit 4 if available. If not available dispatch another Unit.
- 4. Fire Com 1 to bring the Haz-Mat Trailer. If Fire Com 1 is not available to pull the Haz-Mat Trailer, the fire boat tractor can pull it and is presently stored at the 19's engine house.

If Engine 13 is unavailable, dispatch Engine 2. Engine 2 is the backup for engine 13 for DECON.

RADIO PROCEDURE - COMPANY REPORTING IN QUARTERS BY X-RADIO

When a fire company or emergency unit reports in quarters by x-radio, the "FIRE1" Radio Operator will acknowledge. The time out will not be given over the radio. If time out is requested, the FIRE Radio operator will instruct them to call the operator.

EXCEPTION: If the fire phone of the involved station is out of service and the x-radio is being used to relay messages, it is permissible to give the time out over the radio.

SENDING BATTALION CHIEFS TO HOSPITALS DUE TO INJURED FIRE FIGHTERS / injured fire fighters

When a fire fighter is transported to a hospital, notify the Battalion Chief in whose battalion that fire fighter works to bring the necessary papers to the hospital. If he is unavailable, notify another Battalion Chief in that Division.

If both are unavailable, notify the Battalion Chief who is closest to the hospital where the fire fighter was transported.

PROCEDURES FOR OBTAINING COMPANIES FOR RUINS / RELIEF DETAILS

Anytime a request is made for a ruins detail the following procedures will be followed:

The Watch Commander will make a decision from which Division Chief to request ruins / relief companies from based on the location of the incident and the number of other companies out of service on other incidents.

The Watch Commander will request ruins / relief equipment from each of the Division Chief to equally divide the request between all Divisions, within reason.

Requests for equipment will be made to the Division Chief who will notify Fire Communications which company will make the ruins / relief detail. The Division Chief keeps a list of companies that have made details and can equally distribute these assignments. This procedure will assure equal distribution within each Division of ruins / relief details.

FIRE INVESTIGATORS

Fire Investigators will be notified on all:

- 1. Multiple alarm fires
- 2. Fatalities
- 3. Burn victims.

If a request is made for a Fire Investigator between 0730 and 0800 hours, Monday through Friday, The request is to be held until 0800 hours for the on-coming Fire Investigator.

Fire Investigators will be assigned on-call as Primary and Secondary Investigators each day of the year. The primary investigator is to be notified of any request for an investigation. If a request for an investigation is made while the primary investigator is currently engaged in an *investigation and will be involved with that investigation for an hour or more*, then the secondary investigator is to be paged/dispatched.

The Manager of Fire Investigative Services (402) is to be notified anytime the secondary Investigator is dispatched.

FIRE INSPECTORS

Whenever fire personnel advise Fire Communications they need Fire Inspections notified of a situation and it is after normal business hours and/or holidays, Fire Communication will be responsible to either e-mail, call by phone and leave a voice message, or send a notice of the situation by Inter-Office mail.

Fire Communications shall always forward this information on to the Fire Prevention Inspections Bureau. Failure to pass information on could result in harmful consequences.

EVACUATION OF FIRE COMMUNICATIONS / ARMOUR CENTER

If situations exist where personnel must evacuate Fire Communications / Armour Center, the following procedures should take place:

- 1. Engage the master button on the Vocalarm system. This will open all Vocalarm speakers in every engine house and allow dispatching to continue from another site on the Vocalarm radio system. (Every engine house will hear all dispatches.)
- 2. Notify Memphis Police Communications that Fire Communications is evacuating Armour Center and will be rerouting all 9-1-1 calls to our back-up PSAP location at Fire Station 13. Advise them it may take us several minutes to activate the back-up site. We will try to monitor on the Police Department's "H9 Cordova" precinct Talkgroup. We may have Fire personnel at their site on the 12th floor of the Criminal Justice Center (CJC). Advise them the reason(s) for evacuating if it is not self-explanatory.
- 3. If the situation warrants, have personnel relocated to the back-up site at Fire Station 13, and then notify Bell South to forward all of our 9-1-1 calls to the back-up PSAP site. To accomplish this, activate the following procedure:
 - a) Notify Bell South 9-1-1 trouble report center at 1-800-334-0529.
 - b) Identify yourself and our agency.
 - c) Advise the Bell South 9-1-1 trouble report center that you are evacuating the PSAP.
 - d) Give the password "<u>ROCK IN MY SHOE</u>". Report immediately to the prearranged back-up PSAP location at Fire Station 13.
- 4. Bring key ring #60 from the key lock box which is for Fire Station #13, the lock on the fence around the radio receiver building, the storage cabinet inside, and the radio receiver building itself in the rear of the station.

If Time Permits:

- 5. If possible, have personnel take as many portable radios, batteries, chargers, spare flashlights located throughout the dispatch area, the "Street File Listing" and "Running Order Listing" with them when exiting the building.
- 6. Initiate an "ALL" group page, on the pager system to notify personnel of the circumstances involving the evacuation etc. If the transmitter & tower for the pager system survives, this transmission may be successful.

Evacuation Of Fire Communications / Armour Center Continued

7. The Watch Commander should check on the condition of personnel after evacuating from the building, and make a note of any personnel that did not make a successful exit, for a later rescue attempt. If you were able to exit with portable radios, turn on fire and police radios. Personnel should relocate to station 13 by the best means available.

Where To Relocate After Evacuating:

- 1. Fire Station #13 is the pre-designated location to be utilized as the back-up site by Fire Communications personnel.
- 2. The Fire Departments "Mobile Command Vehicle", may be possibly used at station 13 also depending upon the type disaster and the predicament of the radio system.

After Relocating To The Radio Receiver Site Building At Station 13:

 Power-up all radio control stations, computers etc. Load the "off-line equipment status" computer program for maintaining equipment's status. Begin to obtain the status of equipment and update the computer program.

Evacuation Of Fire Communications / Armour Center Continued

Receiving Alarms By Telephone After Relocating To Station 13:

The Following Assumes That Police Communications located in the CJC Survives, And Is Still Operational:

- 1. If the radio system is working, Police Communications can relay by radio 9-1-1 calls received to Fire Communications personnel at station 13.
- 2. Initially, the emergency seven digit number 458-3311 will not be answered until this number can be forwarded by South Central Bell to an answering point or Fire Communications personnel are stationed at a South Central Bell receiving point and relay the information by radio back to Fire Communications personnel at station 13.

The Following Assumes That Police Communications Is Not Operational:

1. Provisions will have to be arranged with South Central Bell to have personnel at a South Central Bell receiving point to relay by radio, all 9-1-1 calls and calls received on the seven digit number 458-3311 back to Fire Communications personnel at fire station 13.

EMERGENCY RADIO COMMUNICATIONS

In the event that a radio console quits operating in the Fire Communications Bureau, the radio operator should first:

- 1. Turn up the volume on the backup mobile radio that is mounted in each radios dispatch console.
- 2. Make sure the backup mobile radio is selected to the Talkgroup that you want to communicate on such as "FIRE1", "EMS1" etc.
- 3. Notify radio repair if open. If after hours Page Manager of Radio Maintenance Harold Williams on the Alpha-mate paging system utilizing his pager #1430, Harold Truebger Supervisor of CAD and the Manager of Fire Communications.

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GENERATORS AT FIRE COMMUNICATIONS

The generator in the basement of the Fire Communications bureau is a 100kW 2000 gallon diesel generator.

The generator will automatically start in about 7 seconds after city power is lost. Once the city power is restored the generator will continue to run for about 1 hour. When the generator is running, a green light on the enunciator panel will light indicating the generator is running.

This generator is tested every Wednesday morning around 0800 hours. This is done per NFPA requirements.

A portable 100 kW Diesel generator (tan colored) is stored on the apparatus floor of Armour Center. This is one of the two <u>portable</u> generators used with the 800 trunked radio system for any generator failures at the new radio tower sites. This generator is also used to supply power to Fire Communications if the primary generator in the basement fails to start.

There are two portable generators which are kept on the apparatus floor at Armour center. The green colored generator operates on diesel fuel while the other red colored generator operates on gasoline.

The red colored generator would be used first to supply power to a life support machine in case of a power failure. If the red generator failed to start then you would use the green generator.

On any generator call you should first notify Manager of Communications and call in an electrician. Before leaving Armour Center, start the generator and leave it running while enroute to the location of the power outage. This is because the generator might not start when you get to the scene and you would have to then return to Armour center and pick up the other generator.

Remember that both generator's have an electrical hook up and are plugged in so the battery will remain charged while not in use. This must be disconnected from the electrical socket before you drive off with the generator.

The directions for starting both generators is located inside the front panel taped to the panel itself. An electrician should always be called in to respond with the generator to the scene when possible.

LOSS OF POWER AT ARMOUR CENTER

If city power fails at Armour Center, the emergency generator located in the basement should crank and begin to supply power within seven to ten seconds to the Fire Communications Bureau. Only certain lights, outlets etc. are powered from this emergency power source. These switches and outlets have red colored switch and receptacle plates to identify these by.

If the emergency generator in the basement fails to crank it will necessitate the following.

Page in at least one if not both Fire Alarm Electricians.

Obtain the keys for the apparatus floor from the key box on the dispatch floor.

Retrieve the keys for an electricians truck equipped with a pentel hook for towing from the key rack located above the layout electricians desk in the electrical shop.

Gain entry to the apparatus floor and raise the overhead door located in front of the generators. Obtain the (tan colored) portable 100 kW generator which is also used to supply power to the new radio sites if a generator were to fail at a tower site. Unplug the generator from the AC electrical outlet, which keeps the battery charged. Hook the generator to the truck and pull it to the rear of Fire Communications beside the stairs that lead to the basement of Fire Communications. The generator should be located as close to the stairs leading to the basement of Fire Communications as possible. The large plug-in cord should be brought to the basement and plugged into the new transfer switch receptacle located just to the north of the basement entrance from the parking lot stairs. Next return to the generator and start the generator. After starting, throw the large 40 ampere switch located behind the left side rear panel door. Return to the basement and engage the button to perform a manual transfer of power from the generator located in the basement to the portable 100kW generator that was relocated outside Fire Communications.

When possible page in Electricians, Manager of Communications. **If assistance is needed dispatch a fire company for manpower to assist.**

Loss Of Power At Armour Center Continued

After emergency generator power is running in the communications office, if the radio and vocalarm consoles are still down, go to air mask and pick up the portable 100kW generator that is stored at air mask. Make sure that airmask is open or have the air truck driver return to open up the Airmask building. Bring the generator to the new radio site at Armour Center and standby for a Fire Alarm electrician or a Radio Maintenance Technician. This generator will be used to supply power to the radio site if it's generator failed. (If after hours page radio repair personnel through the Memphis Police Department, Fire Departments paging system or retrieve phone numbers from "Info-radio repair" file in the CAD system.

GENERATORS ASSOCIATED WITH 800 TRUNKED RADIO SYSTEM

Before any <u>Fire</u> personnel or <u>civilian</u> personnel enter any radio tower site building, either the generator or radio equipment room, the Fire Communications bureau must be advised that entry into these buildings is taking place. Each new radio tower site is monitored with burglar and fire alarm systems. (Radio Maintenance personnel are exempt from this procedure).

When Fire Communications is notified that entry is taking place, notify Radio Maintenance personnel of the situation. If entry occurs after Radio Maintenance work hours, they should have authorized this entry due to a radio problem that has occurred. If we are not aware of a problem with the radio system, page a Radio Maintenance supervisor and verify if entry will be allowed.

Fire Personnel will not have to routinely enter the new 800 trunked radio tower sites for any reason. They are not to check the oil, fuel etc. on these generators as previously was done due to these items being remotely monitored at Radio Maintenance.

The new 800 trunked radio sites are located at:

Fire Station 7

Fire Station 31

Fire Station 45

Fire Station 51

Fire Station 52

MEMPHIS FIRE DEPARTMENT GENERATOR'S

F-Num.	Brand	KW	Diesel /	Fuel Tank	Gallons	Location	Date In	Fuel
		Rating	Gas	Capacity	Per Hour		Service	Pump
314	Onan	71,	G	18	3	Mobile (red)	10-04-74	
315	Onan	15	D	30	4	Mobile (green)		
360	Light Truck	25						
500 TC	Onan	100	D	2000	5	FCB	07-02-73	
500 RM	Generac	100	D	600	8.33	FCB/Prime Site	04-01-96	N/A
500 PSP	Onan	30	Đ	285	4	819 E. Raines	10-29-74	
507	Onan	15	D	285?	4	Material Services	10-14-74	G
507-G	Generac	100	D	600	8.33	F.S. 07	04-01-96	G & D
508	Onan	71,	D	10	3	F.S. 08	10-31-75	
513	Onan	15	D	285	4	F.S. 13	10-10-74	G & D
514-G	Generac	50	D	196		F.S. 14	10-14-96	G & D
516	Kohler	15	G			REMOVED	1989	G & D
517	Generac	50	D	196		F.S. 17	10-14-96	
519	Onan	71,	G	10	3	REMOVED	01-03-74	D
520	Onan	15	D	285	4	F.S. 20	02-01-78	D
521	Generac	50	D	196		F.S. 21	10-14-96	G & D
533	Onan	30	G	150	4	SHOP	02-26-68	
533-G	Generac	50	D	196		F.S. 33	10-14-96	G&D
535	Onan	71,	G	10	3	F.S. 35	05-21-68	N/A
536-G	Generac	50	D	196		F.S. 36	10-14-96	G & D
536	Onan	71,	G	10	3	N/A	02-27-68	N/A
539	Onan	71,	G	10	3	F.S. 39	04-29-73	G & D
541	Onan	15	D	285	4	F.S. 41	10-15-74	D
546	Onan	7 ¹ / ₂	G	10	3	F.S. 46	10-10-76	N/A
547	Onan	15	D	285	4	F.S. 47	10-03-74	G&D
548	Onan	71,	G	10	3	F.S. 48	10-10-76	N/A
549	Onan	7 ¹ / ₂	G	10	3	F.S. 49	10-10-76	N/A
N/A	Generac	100	D	600	8.33	F.S. 51	04-01-96	D

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MEMPHIS FIRE DEPARTMENT GENERATOR'S

Continued

F-Num.	Brand	KW	Diesel /	Fuel Tank	Gallons	Location	Date In	Fuel
		Rating	Gas	Capacity	Per Hour		Service	Pump
552-G	Generac	100	D	600	8.33	F.S. 52	04-01-96	N/A
552	Onan	71,	G	10	3	N/A	09-08-76	N/A
554	Generac	71,	D	18		F.S. 54	01-31-92	G&D
531	Generac	100	D	600	8.33	F.S. 31	04-01-96	N/A
545	Generac	100	D	600	8.33	F.S. 45	04-01-96	N/A
507-MS	Onan	15	D	110	4	Logistics	10-14-74	G
552-Shop	Onan	71,	G	10	3	F.S. 52	09-08-76	N/A
533	Onan	30	G	150	4	F.S. 33	02-26-68	G&D
536	Onan	71,	G	10	3	F.S. 36	02-27-68	G&D
514	Onan	71,	G	10	3	F.S. 14	10-01-82	G&D

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FUELING SITES AND CAPACITIES

Station #	Address	Gas	Daily Average	Diesel	Daily Average	Which Pumps on
		Capacity	Gas on Hand	Capacity	Diesel on Hand	Generator
1	211 Jackson	1000	700	2005	1400	
2	474 S. Main	1014	600 to 900	N/A		
5	65 S. Front	1014		N/A		
7	1017 Jefferson	1014	600 to 900	2005	1000	Gasoline & Diesel*
14	980 E. McLemore	2005	1500	2005	1500	Gasoline & Diesel*
13	333 E. Parkway-N	509	400	1014	600	
16	2203 Lamar	2000	600	2000	800	
17	611 National	1014	750	1014	650	Gasoline & Diesel*
19	2248 Chelsea	N/A		500	250	
20	2034 S. Lauderdale	N/A		500	300	
21	550 S. Mendenhall	500	150	1000	750	Gasoline & Diesel*
26	3345 Millington Rd.	500	450	1000	750	
27	2530 Whitney	N/A		500	250	
32	1670 Channel	N/A		500	250	
33	2555 Winchester	509	250	2005	1000	Gasoline & Diesel*
34	3909 Knight Arnold	500	300	2005	1000	
36	3215 S. Third	509	250	509	250	Gasoline & Diesel*
38	4715 Horn Lake Rd.	N/A		1400	700	
39	1025 E. Raines Rd.	509	150	509	350	
41	2161 Ridgeway	N/A		509	300	
44	6091 Walnut Grove Rd.	N/A		509	300	
47	3510 Coleman Rd.	509	350	1014	750	Gasoline & Diesel
51	5921 Shelby Oaks Dr.	N/A		509	300	Gasoline & Diesel*
54	595 N. Sanga Rd.	509	300	509	350	Gasoline & Diesel
App.	354 Adams	500	250	509	250	
Maintenance						
Armour	79 S. Flicker St.	3008	1500	N/A	N/A	Gasoline only*
TOTAL		18628	11000 to 11900	22525	12750	

^{* =} New generators are in place and will be wired up in next several months from this printing (January 1997)

CONFINED ENTRY SPACE PROCEDURES FOR FIRE ALARM ELECTRICIANS

PURPOSE: To assure the safety of Fire Alarm Electricians entering into any Confined Spaces (Permit Spaces).

A confined entry space is identified as any location that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and is not designed for continuous employee occupancy.

The Division of Fire Services shall insure that each electrician is provided with, and is trained to use properly, personal protective equipment. Electricians, before entering confined spaces such as manholes, vaults etc. should ensure that the atmosphere is safe by the use of a continuos forced air ventilation system. If needed, they should also consult with and/or obtain assistance from South Central Bell.

URBAN SEARCH AND RESCUE (USAR)

The Memphis Fire Department is responsible for one of 26 FEMA Urban Search and Rescue teams within the United States. The Rescue team here is designated as Tennessee Task Force 1 (Tenn. TF-1).

The Federal Emergency Management Agency has been given the Watch Commanders phone number, (320-5310), as the 24 hour a day emergency contact number for notification of the USAR team. Fire Communications fax number was also given as a fax for transmitting information from FEMA to Tenn. TF-1.

If in the event Fire Communications is contacted by FEMA or our local EMA office requesting information on activating TF-1, contact USAR Task Force leader B/C Bondurant, if unavailable Lieutenant James Covington. In the event neither of them can be contacted, notify Manager of Fire Communications.

DISPATCHING TO INCIDENTS INVOLVING THE USE OF WEAPONS OF MASS DESTRUCTION

This SOP has been established to guide dispatchers in the event that a weapon of mass destruction is used against the citizens of Memphis. Dispatchers are the first public safety personnel that may recognize that a weapon of mass destruction has possibly been used against our citizens. Dispatchers can help minimize the fatal effects that a weapon such as this can have upon Division of Fire Services personnel rushing to the scene.

In the event a call is received indicating a large number of victims exhibit signs of being exposed to chemical or biological agents (falling down, gasping, vomiting, foaming at the mouth) or the call indicates a building/facility has been damaged, the following procedures should be followed:

- 1. Try to find out what happened (explosion, popping noises, etc.)
- 2. Try to get an estimated number of victims.
- 3. Get a location in the building or specific area if outside.
- 4. Dispatch 3 engines, 2 trucks, 2 Battalion Chiefs, Closest two Rescue vehicles, Battalion 5, Unit Supervisor, SORT Chief and an appropriate number emergency units.
- 5. Advise responding companies of the possible biological or chemical hazards, give weather conditions, and remind companies to stage at a safe distance until the first company makes their initial assessment.

If a mass casualty incident is declared, the following procedures should be followed:

- 1. Dispatch additional emergency units and make fire company and unit move-ups.
- 2. Notify all on call personnel of situation.
- 3. Notify Memphis Police and Emergency Management.
- 4. Advise EMA to provide an update on the status of bed availability for critical and non-critical patients. This information will be relayed to the Incident Commander and Medical Branch Officer.
- 5. Notify private ambulance companies of the incident.

Additional medical supplies are located at the Logistical Services Bureau. They are located on the west wall behind the west overhead door on a pallet. If they are needed, dispatch the nearest company to get the keys to Logistical Services and the van. One person from that company will deliver the supplies to the scene.

DISPATCHING THE FUEL TRUCK AFTER HOURS

For information on dispatching the fuel truck, first check in the CAD system under INFO-FUEL AFTER HOURS. Use the following information as a backup in case CAD is down.

For fuel needs after 1500 & weekends call city shop 528-2922 or 528-288 if no answer call Jack Pentz - 278-6598, Larry Brady - 529-8382, A.T. Pruitt - 377-8288. If you are unable to contact the above people:

The fuel truck, #GS-382, will be loaded with 1000 gals of unleaded and 1000 gals of diesel. The key for GS-382 is in the PM Shop on the top row of the key board with a pink plasticized card for I.D. The PM Shop is open 24 hours a day, seven days a week including holidays.

DISPATCHING THE RE-HAB TRUCK

Re-Hab Truck will be in service from 0700 hours until 1530 hours daily ONLY if called for by an On-Scene Commander.

After 1530 hours and ONLY if called for by an On-Scene Commander, the Fire Company CLOSEST to Air Mask Services will have to be put on limited man-power with one member sent to Air Mask Services to pick up the Re-Hab Truck and respond to the fire ground. The Air Truck Driver and Medical Re-Hab Officers will have to assist the individual setting up warm weather rehab.

AT&T LANGUAGE LINE SERVICES

The Memphis Fire Department has subscribed to the AT&T Language Line Service. This service provides interpreters for 140 languages, 24 hours a day. If you have a caller who does not speak English, press the xfer/conf. button on your phone and dial 1-800-523-1786 (for emergency calls). The AT&T representative will ask for the language needed (if you know), the client ID number (918021), our organization name (Memphis Fire Dept.) and your personal code (badge number). They will then connect you to an interpreter. You should explain to the interpreter what kind of information you need from the caller. Then press the xfer/conf. button again so that all three persons are on the line. You can then have the interpreter ask the caller specific questions.

If you do not know the language of the caller, the AT&T representative will help you determine that.

OPERATION OF TDD DEVICE

Operation of TDD Device

To use the TDD machine to receive calls from hearing impaired persons, first place the telephone handset into the cups on the machine, making sure the mouthpiece of the handset is on the left side.

Turn the machine on and press the 'shift/select key and the 5 key' together. This will send a message that says 'This is Memphis Fire Department GA'.

You should be able to type and receive messages which will be displayed in the digital display on the machine.

Some codes that are normally used are:

GA for go ahead; enter this when you want the other person to start typing. SK for stop keying; enter this when you are finished with your conversation.

The TDD machine will be tested every Saturday morning by the 7-3 shift.

To test the machine, you can call the Police Dept. at 543-2709 or Interpretive Services for the Deaf at 278-9307.

CHANGE OF HOSPITAL DESTINATION



PURPOSE: To provide pre-hospital personnel with direction concerning a change of hospital destination when deferred from the hospital of choice for any reason.

When transporting to a hospital selected by the patient or a family member or according to destination guidelines and that hospital refuses to accept the patient for any reason, the firefighter fire fighter paramedic should advise the patient and/or family member of the deferral and the reason for the deferral if known. Then request the selection of another hospital to be made. The firefighter paramedic should then contact that facility and advise Medical Control of the situation.

In the event there is no family member present or the patient is unable to make a choice then the firefighter paramedic shall choose the most appropriate emergency medical facility. Fire Communications must be advised of the destination change.

EQUIPMENT CARRIED IN ON EMERGENCY CALLS



PURPOSE: To clarify what equipment is to be taken in with Advanced Life Support Emergency Unit personnel on the scene of an emergency.

Equipment taken in on all calls which take you out of close proximity with the unit (such as a multi-story building or large warehouse) should include stretcher, jump bag, cardiac monitor, and oxygen. Additional equipment such as long spine boards, immobilization devices, etc. may be taken dependent on the nature of the call when dispatched or as determined upon arrival. The jump bag, cardiac monitor, and oxygen should be carried to the patient on all calls.

BLS personnel shall always take at least the jump bag and oxygen.

FIRE STATION PROCEDURES

PURPOSE: To note EMS record keeping responsibilities.

The Firefighter Paramedic is are responsible for the proper record keeping of the unit and shift, which includes, Incident Report Form completion and all pertinent medical records. This also includes logs and journals, daily, weekly, monthly and yearly forms, school record and any other related paper work.

The Firefighter EMT shall assist the Firefighter Paramedic with required record keeping.

FORCIBLE ENTRY

PURPOSE: To direct pre-hospital personnel in decision making concerning forcible entry.

When a call is received through 911, FIRE COMMUNICATIONS or Medical Alarm System and upon the unit's arrival, an immobile person is seen or heard inside a building, forcible entry is permissible. Using caution to minimize damage, forcible entry should be achieved. If a person is not seen or heard, but is suspected to be in the building and unable to respond, forcible entry may be used with police assistance. If additional equipment or manpower is needed a truck company can be requested.

RELEASE OF INFORMATION CONCERNING EMERGENCY CALLS OR PATIENTS

PURPOSE: To provide all personnel with direction concerning information about emergency calls and patients.

Information concerning emergency calls or patients is to be held in strict confidence. Personnel are not to divulge this information to private lawyers, detectives, investigators, etc. without prior approval from the EMS Supervisor/Manager. Information such as location of the patient at the scene, seat belt use, etc. can be given by the senior Firefighter Paramedic, but no medical information without prior approval by the City Attorney.

DO NOT RESUSCITATE DOCUMENT

PURPOSE: "Do Not Resuscitate" documentation Clarification.

The State "Do Not Resuscitate" (DNR) order form number PH-3338 must be honored by the responding MFD EMS personnel when it is presented according to State law guidelines. Those guidelines are as follows:

- 1. An original, a duplicate, or a copy of the properly executed original statewide emergency medical DNR form shall be used.
- 2. It must have the patient's full legal name printed or typed.
- 3. The patient's signature.
- 4. The signature and printed or typed name of the attorney in fact, or the person authorized by a durable power of attorney to make health care decisions for the patient. (DPAH/C) Note: DPAH/C is an abbreviation for the "Designated Power of Attorney Specific to

Health Care."

- 5. Attending physician's full name typed or printed.
- 6. The signature and printed or typed full name of a witness.
 - Note: Signatures do not have to be verified.
- 7. The date the form was executed should be included.
- 8. The patient is identified to the EMS personnel by a family member or health care facility employee, etc. who attests to the identity of the patient.
- 9. The DNR order must accompany the patient during transport and becomes a part of the EMS record.
- 10. In the event of the patients' death, EMS personnel shall obtain the DNR form and it shall become part of the EMS medical record.

If the above guidelines are followed, EMS personnel are protected from criminal prosecution or civil liability under T.C.A. 68-140-601-604. The back of the form explains several palliative measures which should be taken when necessary for the comfort of the patient. Other palliative measures may be rendered upon medical orders.

The DNR order may be canceled verbally at any time by the patient, physician, or attorney in fact. The order may also be canceled by destruction of the form by the patient, attending physician or person with durable power of attorney.

MEDICAL AUTHORITY/MEDICAL CONTROL DESTINATION GUIDELINES

PURPOSE: To provide pre-hospital personnel with a definition of medical authority under the State of Tennessee Destination Guidelines.

DEFINITIONS: Memphis Fire Department Firefighter Paramedics are recognized as the highest medical authority on an emergency scene existing inside the city limits of Memphis, unless a physician is present and accepts responsibility for the medical care of the patient and either travels with the patient to the hospital and signs the incident ticket relative to the orders and treatment given on the scene and in transit if applicable.

<u>Medical Control</u>: The on-line staff physician at the hospital to which a patient is being transported.

SITUATIONS:

<u>TRAUMA</u> - For trauma patients, Medical Control is the Level I Trauma on-line physician at The Med until one of the following situations occur.

- 1. Trauma patients with the following conditions should be transported to the Level I Trauma Center. The Trauma Center should be contacted by the Firefighter Paramedic and notified that the patient is being transported.
 - a. Glasco coma scale less than 13.
 - b. Systolic blood pressure less than 90 mmHg.
 - c. Respiratory rate less than 10 or more than 29.
 - d. Penetrating trauma proximal to the elbow or knee.
 - e. Flail chest.
 - f. Burns with combined area over 15% of body surface, burns to the face, burns to the airway.
 - g. Two or more proximal long bone fractures, a paralyzed limb, or an amputation proximal to the wrist or ankle.
 - h. Fall greater than 10 feet.
 - i. Extrication time greater than 20 minutes.
 - j. Death of another party in the same automobile.

Medical Authority/Medical Control Destination Guidelines Continued

3. If the patient does not fit into one of the above categories, then the pre-hospital personnel must consider the following:

Are there signs of a high energy impact? Signs of this would include:

- a. Accident speed greater than 40 mph.
- b. Velocity change greater than 20 mph.
- c. Auto deformity greater than 20 inches.
- d. Compartment intrusion greater than 12 inches.
- e. Pedestrian struck greater than 5 mph or run over by a vehicle.
- f. Motorcycle accident greater than 20 mph in which the rider was separated from the motorcycle.
- g. A bicycle accident with significant impact.
- h. Fall greater than 10 feet.

In this case the Medical Control physician should be contacted to make a triage decision as to the appropriate facility for transport. (Nearest level I, II or III Trauma Center)

- 4. If a patient does not fit one of the above criteria then the following must be considered. Does the patient fit the following:
 - a. Older than 55
 - b. Have a known cardiac disease
 - c. COPD
 - d. Known mental patient
 - e. Insulin dependent diabetic
 - f. Liver disease, cancer, obese
 - g. Congenital coagulopathy

Under these circumstances Medical Control should be contacted for a triage decision.

If at any time Medical Control at The Med (Level I trauma center) advises that a patient can be taken to an alternate facility, then the on-line physician at that facility becomes "Medical Control" and thus assumes all medical authority associated with that patient.

Medical Authority/Medical Control Destination Guidelines Continued

<u>Medical</u> (non trauma patients) - Any patient who does not fit the above criteria should be transported to the most appropriate facility. When possible, honor the patient's request for hospital destination.

Memphis Fire Service EMS will transport patients, under certain criteria, to Methodist Germantown Hospital, 7691 Poplar Avenue, Germantown Tennessee, beginning August 1, 1999.

Criteria to transport to Methodist Germantown:

- The location of response must be within the designation territory.
- ♦ The patient must request transport to Methodist Germantown Hospital.
- The patient's condition must fall under the guidelines for a level-III hospital.

<u>Pediatric</u> - The Medical Control for pediatric patients is the on-line physician at the facility to which a unit is transporting the patient.

The following is a list of the Tennessee designated Trauma Centers in Memphis:

Trauma Hospitals:

Level I The Med Trauma Center / Shock Trauma

Level II The Med Trauma Center CCA.

Baptist Hospital Medical Center (Central).

Methodist Hospital Central.

St. Francis Hospital

NO TRANSPORT

PURPOSE: To provide unit personnel with a clear approach to handling a common and potentially hazardous clinical decision in the field.

DEFINITION: "No Transport" is the leaving of a patient.

Refusal of Transport:

- All EMS responses which result in refusal of transport must be documented on the incident ticket.
- Incident reports must include a narrative which defines the reason for the call, the patient's direct complaint (if any) and relevant aspects of their physical exam.
- You are to document that the patient is mentally competent to understand the potential risks
 of refusing EMS care and transport. These risks (if any) are to be explained to the patient
 in terms that they can understand.
- When these conditions are met and documented the patient can be released and the unit can be put back in service without contacting medical control.

Mandatory transports (regardless of the patient's wishes): Certain patients must be transported despite their objections or the objections of their parents. Medical control should be contacted if you have any doubts. When necessary, your supervisor and/or police should be called for assistance. These conditions include the following:

- Suicidal, homicidal or psychotic patients '603'
- Overdose patients
- Victims of child abuse or domestic violence
- Patients in police custody if a medical emergency exist

No Transport Continued

Mandatory Contacts to medical control: Cases involving the following problems should always be discussed with medical control prior to accepting a refusal of care. These patients are at a particularly high risk of serious problems and pose a special risk of liability.

- Hypoglycemic patients who have responded to treatment.
- Any patient with a potentially serious illness or injury who is refusing transport.
- Patient age less than 3 or greater than 70.
- Seizure patients.
- Chest pain patients of any age.
- Narcotic / Intoxicated patients who have responded to Narcan, intoxicated patients, patients on drugs.
- Potentially head injured patients.
- Mental patients.

When there is sufficient reason to question if this patient is mentally competent to understand the potential risks notify medical control that this is a "transport refusal" call. Include the following information:

- Unit number
- This is a transport refusal
- Patient age and sex
- Chief complaint or nature of call
- Patient's general condition and/or specific problem
- Patient's mental status and capacity to understand their condition and any risks of refusal
- Patient offered transport and has refused
- Does MD have any recommendations or instructions.

Document the name of the MD and time contacted on your incident ticket.

January 5, 2000

PATIENT INFORMATION

PURPOSE: To ensure all efforts are made to obtain as much patient information as possible to record on the Patient Incident Report.

On all patients, obtain as much billing information as possible such as name, address, social security number, employer name and address, name of insurance carrier, insurance carrier's address and patient's policy number and responsible party information. If you transport a patient who is unable to give you this information, obtain the patient's chart number from emergency department personnel.

After you return to quarters, call the emergency department back to see if any further information about the patient is available, and write any information you receive on the patient's incident report form.

If you have not obtained any further information on the patient at the end of your shift, make a note of this on the patient's incident report form and why the information was not obtained such as:

"Unable to obtain information from patient. Hospital did not have any information on patient at 0630 hours, 3-13-91."

4-12

PROTECTIVE CLOTHING

PURPOSE: To afford personnel with maximum protection against injury or disease while performing their duties.

It is the responsibility of all personnel assigned to a unit to be sure all protective clothing is present on the unit at all times and to take all necessary precautions to protect themselves on all calls from any hazardous condition or disease. This would include, but not be limited to, the following type calls on which protective clothing would be worn:

- a. Your safety is the highest priority. Do not enter or approach any situation which may be harmful to you unless you are outfitted with the appropriate protective clothing and self contained breathing apparatus and have the proper training to engage in such activity.
- b. Fire, Rescue and Hazardous Material Calls Personnel are required to wear full protective "turnout gear" (helmet, turnout coat and pants, boots and leather work gloves, surgical gloves when necessary) while operating within the incident perimeter. The Incident Commander (IC) shall declare when the working area of the incident is safe to modify the clothing requirement. However, personnel may choose to protect themselves sufficiently against likely hazards to be encountered at emergency scenes by wearing protective equipment.
- c. Rescue Calls Personnel are required to wear full protective "turnout gear" (helmet, turnout coat and pants, boots and leather gloves, surgical gloves when necessary) when the lack of their use would most likely cause personal injury. Any piece of the turnout gear that while being worn would interfere with the proper Standard of Care of the patient, can be removed temporarily to provide such care. If it is reasonably safe to do so, and the rescue has been stabilized to the degree that the patient can be cared for in a safe environment, full protective turnout gear is no longer required.
- d. Hazardous Material Calls Personnel are required to wear full protective clothing consistent with the hazardous material involved as indicated by the hazardous material Incident Commander. This may involve full turnout gear and/or airborne pathogen protective clothing. Appropriate protective clothing will be worn until the Incident Commander declares when the working area of the incident is safe to modify the clothing requirement.
- e. Medical Calls If the chances of being exposed to any blood or airborne pathogens exists, personnel are to don protective equipment to protect themselves sufficiently against these hazards prior to initiating any emergency care tasks.

Protective Clothing Continued

Protective clothing on medical calls includes:

- 1. Gloves: disposable gloves: For multiple trauma victims gloves should be changed between patient contacts.
- 2. Masks, Eye wear and Body Suits: These protective barriers should be used in accordance with the level of exposure encountered. Minor trauma with small amounts of body fluids present do not merit the same extent of barrier use as required for exsanquinating victims. Masks and eye wear should be worn by all personnel prior to any situation where splashes of blood or other body fluids are likely to occur. Body suits should be worn to protect clothing from splashes of blood. A change of work clothing should be available at all times at the engine house.
- 3. Back Support Belts: Will be provided to all Fire fighter paramedics and are to be used at their discreation.

It is the personal responsibility of each employee to comply with this standard operating procedure. Additionally, it is the responsibility of all officers to assure that they and their subordinates comply with this procedure.

PATIENT'S PERSONAL EFFECTS

PURPOSE: To provide pre-hospital personnel with direction in dealing with the personal effects of the patient.

EMS Personnel will not inventory the patient's personal belongings on the emergency scene. You will obtain patient information from the patient, patient's family or the hospital records.

Exceptions to this will be in determining the presence and types of drugs or medications belonging to the patient and any other pertinent medical information useful in treating the patient; or if the patient is unconscious and the family is not present.

SPECIAL RESPONSE / TRANSPORT SITUATIONS



PURPOSE: To provide Fire Fighetr Paramedics with instruction in responding to special facilities or in transporting patients under arrest.

Patients Under Arrest: A suspect in custody, requiring emergency medical care by a hospital, shall be restrained and accompanied by the arresting officer. The officer and the Fire fighter Paramedic may reach a mutual agreement for the officer to follow behind the transporting unit. Under these circumstances the patients are to be transported to The Med unless Medical Control reroutes you. Therefore, the on duty physician at The Med (medical or trauma) is Medical Control. Fire fighter Paramedic orders should be received from them.

Charges in this situation should be directed to the arresting agency, except City operated facilities.

Nursing Homes, Doctors Offices, Minor Emergency Clinics: In responding to one of the above facilities, the fire fighter paramedic should receive a history on the patient to be transported in order to provide appropriate care during transport. The receiving facility should be notified of the patient being transported and the condition during transport. The Fire fighter Paramedic shall utilize the current Standing Orders & Protocols for transport situations.

In this situation the patient should be charged.

TRANSPORT DESTINATION

PURPOSE: To offer direction for the Fire Fighter Paramedics in the field in order to transport to the proper facility.

Trauma patients (13 and older) should be transported to the highest level of care, if trauma variables exist. Otherwise the decision for transport should be made by the Medical Control physician at the Trauma Center.

Burn Center - The Burn Center will accepted patients age 4 and older.

Other cases - Any patient of legal majority (age 18 or older) or the patient or legal guardian of any minor patient, or a member of the patient's immediate family, shall have the right to request transport to a specific destination. The person making the decision should be informed that Tennessee has a trauma system which may in the patient's circumstances, require transport of the patient to another facility.

Non-trauma Patients - Any non-trauma patient should be transported to the most appropriate facility according to the patient or family request or to the facility that has the level care commensurate with the patient condition. In the event that the patient is unable to decide and there is no family member available, then the Firefighter Paramedic should decide which facility is most appropriate for the patient.

Pediatrics - Pediatric patients should be transported to an appropriate child care facility. Obviously, there is a children's medical facility in the city of Memphis that should be considered for critical patients. Otherwise, the request of the patent or legal guardian should be honored.

PERSONNEL AT HOSPITALS

PURPOSE: To show the proper conduct for Personnel at the hospital.

After personnel have delivered a patient to the hospital, they are to do the necessary paperwork at the hospital as quickly as possible and in a location that does not interfere with hospital personnel.

The usual amount of time necessary to complete required paper work is 30 minutes. This allotted time will be used for preparing the Unit for the next call, and completing both the Fire Department "Run Report" and the "State Encounter Form". If circumstances cause an Emergency Unit to remain at a hospital for a longer period of time, the Fire Fighter Paramedic shall notify the Watch Commander. This should be documented on the incident form.

EMS personnel are expected to conduct their business, clean the unit and equipment and return to service as quickly as possible.

STANDING BY FOR POLICE

DEFINITION: Standing by for the police means positioning (staging) the unit and its personnel a safe distance from a possible violent situation.

RESPONDING TO A VIOLENT CALL: When dispatched on a call which suggests imminent danger such as a shooting, a stabbing, mental or violent party, the Firefighter Paramedic shall stage the unit and personnel a safe distance from the scene. Turn off all emergency warning signals. Advise Fire Communications the Unit is standing by for the police and give an exact location. Do not advise "On Scene" until actually at the patient's location.

ON A CALL WHICH BECOMES VIOLENT: If the scene becomes unsafe, leave the scene immediately and advise Fire Communications that it has become necessary to leave the scene and that the police are needed at your location. Advise Fire Communications the "nature" (reason police are needed). Position personnel and unit (if possible) a safe distance from the incident. Advise the supervisor of your situation. Do not reenter the scene until notified by Fire Communications that the scene has been secured by the police.

ON a D.O.A.: Stand-by for the police on a D.O.A. in order to secure the scene, relay information, and/or comfort the family. If there are no extenuating circumstances (evidence of foul play, no family is present, etc.) you may return to service. D.O.A.'s will not be left in public view or in a place of business unless released to proper authorities.

STRETCHER HANDLING OF A LARGE PATIENT

PURPOSE: To avoid personal injury when handling patients.

When the Fire Fighter Paramedic determines a patient to be potentially too large to handle safely with two people, they will call for a fire fighting company to assist.

A general guideline is to request assistance with all patients over 250 pounds. This does not exclude any situation in which the emergency unit personnel deem it necessary to request such help to load or unload a patient regardless of the patient's weight.

UNIT OUT OF QUARTERS NON-EMERGENCY CALL

PURPOSE: Units leaving the house for reasons other than dispatched calls such as training, mechanical repairs, picking up of supplies, public relation appearances, etc.

The Fire Fighter Paramedic will request permission from the Field Supervisor and clear with Fire Communications to leave assigned area. Once permission is granted, enter in the house log book "Unit # on the air" and the time leaving. Be sure and log on the daily log sheet, CR-7, if appropriate.

The Fire Fighter Paramedic will notify the company officer if they discover, while in the engine house, the emergency unit needs a repair. The company officer will then notify the EMS Supervisor 202. EMS Supervisor 202 will then schedule the repair with Apparatus Maintenance. EMS personnel will notify EMS supervisor 202 directly if they discover, while away from the engine house, the unit needs repairs. For repairs which necessitate the unit being placed out-of-service, the unit will notify the EMS unit Supervisor 202 and Fire Communications. Enter in the house log book and the unit log book the time the unit was placed out-of-service and any pertinent explanation. Also include on the daily log sheet and the unit's monthly report.

For public relations the units remain in-service, unless informed otherwise, and the radio must be monitored.

Enter time and reason leaving the engine house in the house log book and unit log book. Be sure to include this on the daily log sheet, CR-23, and the units monthly report.

REQUESTING AIR AMBULANCE TRANSPORT



PURPOSE: Guidelines to be used for requesting the Air Ambulane Transport.

DO NOT call for air ambulance transport if the patient is in traumatic cardiopulmonary arrest. If the patient has no vital signs, they are a trauma full-arrest.

A scene flight by air ambulance MAY be indicated IF:

The Level - I trauma patient's condition warrants immediate and extreme action and the extrication and / or transport time is greater than 30 minutes and if the patient is not in trauma full arrest.

Transport time is defined as the length of time beginning when the emergency unit leaves the scene transporting until time of arrival at the emergency department.

Two Hospital Wing Units are routinely available to respond to any incident when requested. Incident Commanders, Emergency Unit personnel and Company Officers may request the Hospital Wing to respond. The senior medical Officer on the scene is to be notified of such request. Personnel requesting the Wing should take into consideration the Landing Zone requirements etc. found under 'Helicopter - Landing And Ground Procedures' in the Fire Suppression Standard Operating Procedures.

The hanger for the Hospital Wing is located at 1080 Eastmoreland / I240-midtown. If the Wing is requested they can turn-out, be airborne and on the scene within approximately ten (10) minutes. The Hospital Wing Unit is a twenty-four (24) hour a day operation. Sometimes both Wing Units may be out of town on calls and neither available.

Once a Hospital Wing Unit is requested they can be disregarded by notifying Fire Communications. Personnel should also review *'Dispatching And Operating Guidelines - Hospital Wing Units'* in the Fire Communications Standard Operating Procedures. The Fire Communications SOP deals with utilizing fire radio frequencies etc.

Requesting Hospital Wing Units Continued -

Guidelines For Requesting The Wing Unit:

- 1. Can the Wing Unit land per Landing Zone requirements?
- 2. Number of Trauma patients involved, degree of injury of patients, versus response time and/or availability of emergency units.
- When the Wing is requested, additional resources will be needed to provide adequate manpower to secure a landing zone. (This may consist of additional fire companies, Command Officers, and/or police).
- 4. The Wing is unable to transport adult patients under certain conditions:
 - a. Adults who have a traction splint applied.
 - b. Patients over 6'3".
 - c. Patients whose weight exceeds 350 lb.
 - d. Padded board splints that exceed the boundary of the long spine board.
- 4. If a trauma patient needs to be transported by the Wing and a fractured femur must be treated, then the mast trousers should be applied as a air splint. All rules for air splints will then apply to the mast trousers.
- 5. Pediatric patients who have padded board and traction splints applied can be transported provided the splints do not exceed the boundary of the long board.

January 5, 2000

HELICOPTER LANDING AND GROUND PROCEDURES

PURPOSE: To guide personnel in safely utilizing helicopters during emergency operations. When helicopters are dispatched to assist in emergency operations, the fire communications bureau shall dispatch an engine company and get the helicopter's estimated time of arrival. This information is forwarded to the incident commander who will relay this information to the Medical Branch Officer or senior Fire Fighter Paramedic.



DUTIES OF THE COMPANY: Select a landing zone according to criteria set forth. Set up the landing zone appropriately, including the proper lighting. Be aware of these special precautions once the helicopter has landed.

- A. Main Rotor
- B. Tail rotor -This is the most dangerous part of the helicopter; therefore, one company member should be assigned to guard this area.
- C. Pitot Tubes Extremely hot
- D. Ground Control
- E. On Scene Safety
- F. Handle any incident that arises during emergency operations
- G. Clear area of all personnel and debris during take-off

THE LANDING ZONE:

A. Select A Landing Area - If possible, approximately 300 feet from the patient location. the area should be flat as possible. At no time, should the slope exceed 10 degrees from the horizontal.

100 X 100 Feet In Daytime 200 X 200 Feet In Nighttime

- B. Notify the Incident Commander of the location. In turn, the incident commander will notify the medical branch.
- C. Clear the area chosen of obstacles and loose debris.
- D. Assure that no power lines or aerial obstacles inhibit helicopter approach.

Helicopter Landing And Ground Procedures Continued

E. Marking landing area

- 1. Daytime consider smoke flares if available, they will identify landing area and indicate wind directions.
- 2. Nighttime point headlight of vehicles toward landing site. Any subsequent lighting should not be directed toward the approaching helicopter.

GROUND SAFETY TIPS:

All personnel must wear helmets with visor down or safety gloves. Approach the helicopter only when signaled by the pilot. When approaching or leaving the helicopter, crouch low, approach at a 45 degree angle to the nose. Approach from the low side of the slope. Stay in the pilot's field of vision. Carry tools no higher than your waist. Hold on to your helmet.

PATIENT WEIGHT LIMITATIONS: The patient must not exceed 350 pounds.

COMMUNICATIONS: Refer To Fire Communications Standard Operating Procedures.

REHABILITATION OF PERSONNEL AT INCIDENTS (rehab sector)

CALLING FOR REHAB:

When Rehab is called for, the following guidelines shall be followed:

- 1. The Incident Commander will advise the location where Rehab is to be established, and if a MATA / Fire bus will be needed due to climatic conditions. (*Should be located several floors below the fire in a High-Rise fire*).
- 2. Fire Communications will dispatch one Emergency Unit specifically for Rehab, if one has not already been assigned this duty. The weather conditions will be given to the Emergency Unit responding. The Emergency Unit Supervisor will be dispatched/notified that Rehab has been established.
- 3. The Fire Fighter Paramedic on the 1st unit will be designated as the Rehab Officer after arriving on the scene and establishing a Rehab area until relieved by a higher medical authority. The Rehab Officer will report directly to the Incident Commander. Additional Units may be requested, as deemed necessary by the Rehab Officer.

REHAB OFFICERS RESPONSIBILITIES:

The REHAB OFFICERs responsibilities will include the monitoring and documentation of <u>ALL</u> vital signs and general clinical appearance of firefighters sent to Rehab. Emergency Units are equipped with a log book for documentation. At this time the parameters for determining the ability of fire fighters to return to active suppression activities will be left to the discretion of the Rehab Officer. The guidelines should be consistent with those that would be used to determine the general welfare of any patient. A base line shall be established to determine the fire fighter's improvement status. If any irregular signs are noted, proper treatment should be initiated and transportation provided by another Unit.

The Fire Division's Medical Director recommends that particular attention must be directed to the fire fighter's heart rate and oral temperature. After 10 minutes of rehabilitation, firefighters with pulse rates greater than 120 or oral temperature greater than 100.6 F, should remain in REHAB for continued evaluation. Firefighters should be reassessed every 10 to 20 minutes and returned to firefighting duties once the heart rate and oral temperature return to normal limits. Firefighters that maintain pulse rates greater than 120 or temperatures greater than 102.0 F for longer than 50 minutes should not return to firefighting activities and should be considered for an emergency facility evaluation.

VISUAL CHECK OF CONTROLLED DRUGS AT SHIFT CHANGE

The Fire Fighter Paramedic will carry the key to the box carrying the controlled-drugs. The Firefighter Paramedic is to always carry the key on his person. The on-coming and off-going Fire Fighter Paramedic will visually check the controlled drugs (narcotics) at shift change. The Fire Fighter Paramedic is to document the check on the narcotic form and in the log book. Strict adherence to this Standard Operating Procedure is expected.

INCIDENT REPORT FORM PREPARATION

Before turning in incident report forms, the following procedures will be followed:

- Do not staple the EKG strip and state encounter form to the incident report form.
- ◆ Tape all EKG strips to the back of the white (original) copy of the ticket. Tape all four edges of the EKG strip so it will not pull off the ticket. Fold a long EKG strip so that a six-second sample is visible. Write the patient's name and incident report number on the EKG strip so it is identifiable if it becomes detached from the incident report.
- Separate the tickets from the state encounter form into two bundles and place them in the same envelope.
- ◆ Turn in tickets in sequential order with the smallest number first. <u>Do not fold each ticket separately.</u>
- Remove and dispose of all carbon paper and any pink copies not left at the receiving emergency department.
- Mark all charges that apply to patient. Review the charges for correctness.
- Flag all tickets involving City of Memphis employees injured or sick while on duty. Flag the ticket by stapling the pink copy to the front of the ticket.

LOCATION OF HOSPITAL DECONTAMINATION ROOMS & METHOD OF WASTE REMOVAL

ELVIS PRESLEY TRAUMA CENTER

The Decontamination Room is located at the ambulance entrance through the left corridor in room G157 to the right. The waste material goes down a drain to the sewage system. This location is temporary; A new facility will be built in the near future.

BAPTIST CENTRAL HOSPITAL

The Decontamination Room is located at the Monroe Clinic, 899 Madison, North of the Baptist Central Hospital ambulance entrance in the physical therapy room (217M) across from the U-T library. The waste material can be contained by drain plugs. Removal of the waste is directed by the safety officer.

METHODIST CENTRAL HOSPITAL

The Decontamination Room is located at the ambulance entrance between the corridors before entering the emergency room. The waste material goes indirectly to a floor sink to a common drain before entering the sewage system. It can be plugged for waste material but has never been ordered to be plugged.

ST. FRANCIS HOSPITAL

The Decontamination Room is located at the ambulance entrance in the back of the triage room. The waste material can be contained by drain plugs before entering the sewage system.

VA HOSPITAL

The secondary Decontamination Room is located in the physical therapy room (BE126). The waste material can be contained in Hubbard tanks: can be plugged at the tank before entering the sewage system. The M.F.D. is responsible for primary decontamination.

LEBONHEUR HOSPITAL

The Decontamination Room is located at the ambulance entrance through the corridors to the left. The waste material goes down a common drain to the sewage system.

METHODIST SOUTH HOSPITAL

The Decontamination Room is located at the ambulance entrance through the corridor that is to the left before entering the emergency room. The waste material goes down a common drain to the sewage system.

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Location of Hospital Decontamination Rooms & Method Of Waste Removal Continued

DELTA MEDICAL CENTER

The Decontamination area is located at the ambulance entrance on the lot. The waste material goes down a drain to the sewage system.

BAPTIST HOSPITAL EAST

The Decontamination Room is located at the ambulance entrance to the immediate right. The waste material goes to a acid reducer tank (filtering system) before entering the sewage system.

METHODIST NORTH HOSPITAL

The Decontamination Room s located at the ambulance entrance through the corridor to the left. The waste material goes to holding tanks and later pumped in containers.

WILLIAM F. BOWLD

The Decontamination Room is located at the ambulance entrance on Court St. through the corridor on the left side. The waste material goes down a sanitary drain to the sewage system.

E. H. CRUMP WOMEN HOSPITAL

The Decontamination Room is the same as the Elvis Presley Trauma Center

FIRE FIGHTER EMT-BASIC RESPONSIBILITIES

It must be understood that a FF/EMT-Basic is not detailed to the emergency unit just to drive. The FF/EMT-Basic is part of a team dispatched to provide appropriate care and treatment to the sick and injured.

The Fire Fighter EMT-B shall assist the Fire Fighter Paramedic within the EMT-Basic Scope of Practice and other duties as outlined in this Operations Manual and memorandums related to emergency medical operations.

These standing orders and protocols may be used by Memphis Division of Fire Services personnel licensed by the State of Tennessee Division of Emergency Medical Services to render appropriate care. All Fire Fighter Paramedics are to continually familiarize themselves with these. These standing orders and protocols are applicable regardless of the final destination of the patient.

No MFD Paramedic or Fire Fighter Paramedic may function as such without successful completion by written documentation of competency in these Standing Orders and Protocols by the Division Medical Director or his designee.

Note:

- 1. In the adult cardiac arrest:
 - a. all I.V./E.T. drugs given should be followed by a 10 cc N.S. bolus
 - b. elevate the extremity after bolus when given I.V.
 - c. drugs administered endotracheally should be 2 2.5 times the I.V. dose
- 2. In the pediatric cardiac arrest:
 - a. all E.T. drugs given should be diluted with N.S. to a volume of 3 -5 mL
 - b. all E.T. drugs given should be followed with a 3 5 mL N.S. flush and hyperventilation
 - c. all I.V. drugs given should be followed by a bolus of at least 5 mL and elevation of the extremity
- 3. Fire Fighter Paramedics have standing orders for precautionary I.V. and INT's
- 4. Fire Fighter Paramedics have standing orders for adult and pediatric Epinephrine drips in cardiac arrest and are encouraged to utilize this.
- 5. Use of Pneumatic Anti-Shock Device (PASG):
 - The chance of patient's survival without the use of the PASG device should be evaluated prior to utilizing the PASG device. Orders must be received from Medical Control prior to inflation when used in the treatment of hypovolemia.
- 6. When contacting Medical Control provide the following minimum information;
 - a. Patient's chief complaint
 - b. Is patient stable (define) or unstable (define).
 - c. Your ETA to their Emergency Department
 - d. Ask Medical Control what other information they need.

Continued

7	Treat the	patient not	the	monitor
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8. For each and every protocol, the first directive is to take body substance isolation precautions.

DEFINITIONS

- 1. Standing order means that this skill or treatment **may** be initiated prior to contact with medical control.
- 2. Protocol a suggested list of drugs or treatment options **requiring** you to contact Medical Control **prior** to initiation.
- 3. Medical Control the Staff Physician on duty at the receiving Emergency Dept.
- 4. Medical Director the physician who has ultimate responsibility for patient care aspects of the EMS System.
- 5. Unstable (symptomatic) indicates that one or more of the following are present;
 - a. chest pain
 - b. dyspnea
 - c. hypotension (systolic B/P less than 90 mmHg in a 70 kg pt or greater)
 - d. congestive heart failure or pulmonary edema
 - e. myocardial infarction or signs of ischemia
 - f. altered level of consciousness
- 6. Stable (asymptomatic) indicates that the patient has no or very mild signs and symptoms associated with the current history of illness.

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ADULT CARDIAC EMERGENCY

Pulseless Electrical Activity (P.E.A.)

A. Assessment

Presence of electrical cardiac rhythm without palpable pulse. Confirm rhythm with quick look paddles or electrodes.

B. <u>Treatment - Standing Order</u>

- 1. CPR with 100 % Oxygen
- 2. Intubate and I.V. N.S. (large bore catheter)
- 3. Epinephrine 1:10,000 1.0 mg I.V.P. or 2.0 mg E.T. q 3-5 minutes and consider use of Epinephrine Drip.
- 4. If rate is below 60 / min., administer Atropine 1 mg I.V.P. or 2 mg E.T., repeat q 3-5 mins. (max. 0.04 mg/kg or 3 mg)
- 5. Search for underlying cause of arrest and provide the related therapy:
 - a. hypoxia ensure adequate ventilation
 - b. hypovolemia fluid administration /fluid challenge
 - c. cardiac tamponade
 - d. tension pneumothorax needle decompression
 - e. KNOWN hyperkalemia Sodium Bicarbonate
 - f. acidosis, drug overdose, massive MI and hypothermia according to the prescribed approach.

6. Consider:

Narcan

Dextrose

ADULT CARDIAC EMERGENCY

Premature Ventricular Contractions (P.V.C.)

A. Assessment

Any P.V.C. in acute M.I. setting with associated chest pain More than five (5) P.V.C.'s per minute and symptomatic Multi-focal P.V.C.'s

Salvo's (two or more P.V.C.'s in a row) and symptomatic P.V.C.'s occurring near the "T-wave"

B. Treatment - Standing Order

- 1. 100% Oxygen / Monitor E.K.G.
- 2. INT or I.V. N.S. K.V.O.
- 3. If patient is bradycardic with P.V.C.'s, use Atropine 0.5 mg IVP q 5 minutes up to 2 mg. Refer to Bradycardia protocol.
- 4. Lidocaine 1.0 1.5 mg/kg I.V.P., additional boluses of 0.5 mg/kg can be given q 5 10 mins. if necessary up to total of 3 mg/kg. When treating the elderly or with patients who have blood pressures in the lower range of normal, a lower dose of Lidocaine (1/2 of normal) is given.
- 5. If P.V.C.'s resolve, start Lidocaine drip 2 4 mg/min based on loading dose

C. Treatment - **Protocol**

1. If P.V.C.'s are not suppressed within five minutes or patient remains unstable, Contact Medical Control, consider:

Procainamide 20 - 30 mg/min up to 17 mg/kg max. unless:

P.V.C.'s are suppressed

Q.R.S. widens 50 %

Hypotension develops

Note: If Procainamide is not effective, Bretylium 5 - 10 mg/kg over eight to ten minutes up to 30 mg/kg max.

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ADULT CARDIAC EMERGENCY

Supraventricular Tachycardia (S.V.T.)

	STABLE: Standing Order:		UNSTABLE: Standing Order.
1.	ABC's, O2, IV/INT, Vitals Signs, History and History and Assessment	1.	ABC's, O2, IV, Vitals,
	Protocol	2.	Adenocard 6mg rapid IV push. If no change, Adenocard 12 mg rapid IV push
		3.	Premedicate with 5 - 15 mg Valium PRN
2.	Contact Medical Control, consider: Vagal Maneuvers a. hold breath b. cough or gag reflex stimulation c. Carotid Massage 1. requires Physician's orders if pt age is > 65 y/o 2. Contraindicated with Bruit	4.	Synchronized Cardioversion 50 J PSVT Atrial Flutter 100 J Atrial Fibrillation 200 J 300 J 360 J
	Adenocard 6mg IV rapid IV push Repeat Adenocard PRN Verapamil, Procainamide, or cardioversion	5.	Unsynchronized Cardioversion is acceptable when synchronization is too slow or unit will not sync. Be prepared for V-Fib protocol.

Protocol

1. Contact Medical Control, consider: Procainamide, Verapamil

NOTES:

- 1. If you are uncertain of the origin of the Tachycardia, DO NOT administer Verapamil. Verapamil in Ventricular Tachycardia may be fatal. Procainamide is the drug of choice in this situation.
- 2. As large a bore IV in the Antecubital Fossa as possible should be established.
- 3. Other vagal maneuvers may include asking the patient to hold their breath, trendelenburg position.
- 4. Carotid Sinus Pressure should be applied on the right if possible. If no effect, then try the left side. **NEVER** massage both sides at once.
- 5. Unstable SVT may be synchronized cardioverted immediately in frankly unstable patients prior to IV access. Assess the situation and make a good decision. Cardioversion hurts!

ADULT CARDIAC EMERGENCY

Atrial Fibrillation and Flutter

A. Assessment

Paroxysmal Atrial Tachycardia Atrial Flutter Atrial Fibrillation Symptomatic

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient's condition
- 2. I.V. access
- 3. Valsalva maneuver
- 4. If blood pressure is stable administer Verapamil 2.5 5 mg I.V. slowly over two minutes.
- 5. Synchronous cardioversion (Valium 5 15 mg I.V. if conscious) atrial flutter @ 50 joules atrial Fib. @ 100 joules

Note: When treating the elderly or with patients who have blood pressures in the lower range of normal, a lower dose of Verapamil (2-4 mg) is given over a longer period of time (3-4 mins.)

Immediate synchronized cardioversion (100 / 200 / 300 / 360 joules) is recommended when there is an unstable rhythm with **serious signs and symptoms**:

- a. chest pain
- b. shortness of breath
- c. decreased level of consciousness
- d. low blood pressure

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ADULT CARDIAC EMERGENCY

Bradycardia

A. Assessment

Heart rate less than 60 beats per minute

Signs of decreased perfusion and symptomatic

Rhythm may be sinus bradycardia, junctional, or heart block

If patient is asymptomatic and heart rate is greater than 60 beats per minute, transport and observe.

B. Treatment - Standing Order

- 1. Oxygen 100 %
- 2. I.V. N.S. K.V.O.
- 3. Atropine 0.5 1.0 mg I.V. q 3-5 mins. up to 0.04 mg/kg or 3 mg if symptomatic and unstable
- 4. Contact Medical Control for Transcutaneous Pacing if available
- 5. Consider:

Dopamine drip 5mcg / kg / min to 20 mcg / kg / min is recommended when hypotension is associated with the bradyarrythmia.

6. For severe symptoms refractory to other therapy:
Isoproterenol infusion starting at 2 mcg / min to 10 mcg / min
Epinephrine infusion starting at 2 mcg / min to 10 mcg / min

Note: In compromised patients, asking the patient to cough repeatedly may give you enough time to initiate drug therapy.

ADULT CARDIAC EMERGENCY

Chest Pain / Myocardial Infarction

A. Assessment

Determine quality, duration, and radiation of pain

Myocardial Ischemia

Substernal Oppressive Pain

Nausea / Vomiting

Dyspnea

Diaphoresis

Palpitations

History of Coronary Artery Disease

Taking current cardiac medications

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient condition
- 2. Position of Comfort
- 3. Vital Signs and Cardiac Monitor
- 4. Nitroglycerine 1 metered dose spray q 5 min for a maximum of 3 doses as needed or **unless** hypotensive
- 5. INT or I.V. N.S. K.V.O.
- 6. Treat the arrythmias appropriately
- 7. If the patient has taken three or more NTG prior to EMS arrival, give one NTG metered dose spray while moving directly to consideration of Morphine**.

Consider:

**Morphine Sulfate, 2 - 4 mg IV PRN if patient's chest pain is cardiac related and their pain is at least "5" on a scale of "1 - 10" with 10 being the worst pain they have ever felt after NTG regimen.

If these conditions do not exist, you must <u>first</u> contact Medical Control for orders for MS.

C. Treatment - **Protocol**

Consider: Repeat MS 2 - 4 mg q 3 - 5 minutes IV for a maximum of 10 mg IV

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ADULT CARDIAC EMERGENCY

Ventricular Asystole

A. Assessment

Confirm cardiac rhythm with quick look paddles or electrodes Confirm and record in two leads to confirm Asystole and to rule out fine V-Fib.

B. Treatment - Standing Order

- 1. C.P.R. with 100 % oxygen
- 2. Intubate and establish I.V. N.S. K.V.O.

If available, transcutaneous pacing is recommended early in patients who suddenly become asystolic due to Stokes-Adams attacks or vagal discharge following defibrillation Defibrillation for possible fine ventricular fibrillation masquerading as asystole

- 3. Epinephrine 1:10,000 1 mg I.V.P. or 2.0 mg E.T. q 3 5 mins. or Epinephrine Drip to deliver 1 mg per min.
- 4. Atropine 1.0 mg I.V.P. or 2.0 mg E.T. q 3 5 mins. up to 0.04 mg/kg or 3 mg
- 5. Try to identify underlying cause of arrest including hypoxia, hyperkalemia, hypokalemia, acidosis, drug overdose, hypothermia, and treat accordingly.
- 6. Consider: Sodium Bicarbonate 1 mEq/kg I.V.P. followed by 0.5 mEq/kg q 10 mins.

In protracted arrest where the patient has failed to convert to a stable rhythm, high dose epinephrine 0.1 mg/kg q 3-5 mins. **EXCEPT** if you have initiated an Epinephrine Drip.

C. Treatment - Protocol

Contact Medical Control, consider:

Termination of Efforts if "termination of efforts" criteria exists

D. Special Causes of Asystole

Hypothermia - efforts should be directed to rewarming, rapid transport to hospital for invasive rewarming techniques. Prolonged resuscitation is warranted.

Electrocution/Lighting Strike - often results in Asystole. For such arrests, prolonged resuscitation may be successful.

ADULT CARDIAC EMERGENCY

Ventricular Fibrillation

A. Assessment

Ventricular Fibrillation

Pulseless

Confirm and record cardiac rhythm with quick look paddles or electrodes

B. Treatment - Standing Order

- 1. CPR with 100 % oxygen (precordial thump if witnessed)
- 2. Check cardiac monitor and identify V-Fib or V-Tach w/o pulse
- 3. Defibrillate @ 200 / 300 / 360 joules
 Do not re-check pulse between these defibrillations if monitor remains unchanged.
- 4. C.P.R. if no pulse
- 5. Intubate and establish I.V. N.S. K.V.O.
- 6. Epinephrine 1:10,000 1 mg I.V.P. or 2.0 mg E.T. q 3 5 mins. or initiate an Epinephrine Drip
- 7. Defibrillate @ 360 joules * within 30 60 seconds of medication administration
- 8. Lidocaine 1.5 mg/kg I.V. q 3-5 mins. up to 3 mg/kg max. or 3.0 mg / kg E.T.
- 9. Defibrillate @ 360 joules * within 30 60 seconds of medication administration
- 10. Bretylium 5 mg/kg I.V.P.
- 11. Defibrillate @ 360 joules * (wait 1-2 mins. after Bretylium)
- 12. Bretylium 10 mg/kg I.V.P. q 5 mins. up to max. 30-35 mg/kg
- 13. Defibrillate @ 360 joules * (wait 1-2 mins. after Bretylium)
- 14. Lidocaine 0.5 mg/kg dose q 8-10 mins. (up to 3 mg/kg maximum total)



ADULT CARDIAC EMERGENCY

Ventricular Fibrillation - Continued

16. Consider:

Sodium Bicarbonate 1 mEq/kg I.V.P. if post arrest time is greater than 20 minutes

Procainamide 30 mg / min. (max 17 mg/kg)

Notes:

*Check for pulse and rhythm after each defibrillation

Initiate and continue drug - shock - drug - shock - drug sequence

Start I.V. infusion of antiarrhythmic agent that resolved arrhythmia

Time on scene should be taken to aggressively treat ventricular fibrillation when patient is intubated and I.V. access is obtained and when in the best interest of the patient

Prompt defibrillation is the major determinant of survival

Defibrillation should not be delayed for any reason other than rescuer or bystander safety

C. Treatment - **Protocol**

Contact Medical Control for further orders when necessary

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ADULT CARDIAC EMERGENCY

Ventricular Tachycardia

A. Assessment

Confirm and record cardiac rhythm with quick look paddles or electrodes Check for palpable carotid pulse

Symptoms (e.g., chest pain or dyspnea), **Signs** (e.g., hypotension, systolic B/P less than 90 mm Hg, congestive heart failure, ischemia, or myocardial infarct) - **indicates an unstable patient**.

B. <u>Treatment - Standing Order</u>

Pulseless: Treat with Ventricular Fibrillation Protocol.

Stable - Standing Order	<u>Unstable - Standing Order</u>	
Oxygen commensurate with pt's condition	Oxygen 100% / I.V. N.S. K.V.O.	
INT or IV NS KVO	Synchronized Cardioversion	
	50 joules	
Protocol	100 joules	
Contact Medical Control	200 joules	
	360 joules	
Lidocaine 0.5 - 0.75 mg/kg q 5-8 mins		
until V-Tach resolves or 3 mg/kg max.		
Procainamide 20-30 mg/min up to 17 mg/kg	If recurrent, add Lidocaine and cardiovert	
until	again starting at energy level previously	
V-Tach resolves, QRS widens 50 %, or	successful, then Procainamide, or Bretylium	

Note: Stable - patient's pulse is present, patient is not hypotensive, and patient has no complaints related to V-Tach.

hypotension develops

If the patient is refractory to lidocaine and procainamide, bretylium is administered 5 mg/kg slowly over 8-10 minutes to a max of 30 mg/kg within 24 hrs. period.

Start I.V. infusion of antiarrhythmic agent that resolved arrhythmia

ADULT CARDIAC EMERGENCY

Ventricular Ectopy

A. Assessment:

Multifocal PVC's

More than six per minute and symptomatic
Short runs of V-Tach and symptomatic
PVC's getting close to the T-Wave
Couplets

- B. When these signs and symptoms are present:
- 1. Chest pain of possible cardiac etiology
- 2. Hypotension
- 3. Dyspnea
- 4. Pulmonary Edema
- 5. Altered L.O.C
- C. Treatment Standing Order
- 1. Oxygen 100%
- 2. IV N.S. TKO or INT
- 3. Lidocaine 1.5 mg/kg slow IV push
- 4. Lidocaine drip at 2 4 mg per minute
- 5. If PVC's not controlled, administer additional Lidocaine bolus

Consider:

Procainamide or Bretylium

If patient is bradycardic with frequent PVC's, DO NOT suppress the PVC's. Turn to the bradycardia algorithm. The PVC's may be a compensatory mechanism.

Treat PVC's only when the patient is symptomatic.

When signs and symptoms are not present

- 1. Oxygen, INT, cardiac monitor
- 2. Transport

Protocol

3. Contact Medical Control for direction of the call.

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ADULT ENVIRONMENTAL EMERGENCY

Chemical Exposure

Special Note: Your safety is the highest priority. **Do not** enter or approach any situation which may be harmful to you unless you are outfitted with the appropriate protective clothing and self contained breathing apparatus and have the proper training to engage in such activity.

A. Assessment

History of exposure to chemical Protect yourself from danger of exposure Identify substance and verify with documentation Material Safety Data Sheets (M.S.D.S.) if available Consider Self Contained Breathing Apparatus

B. Treatment - Standing Order

If Internal Exposure and Conscious: Treat as Drug Ingestion

If External Exposure:

Remove victims clothing

Decontaminate

Powder or like substance

brush off of patient

flush with copious amounts of water for at least 20 minutes transport and continue flushing if necessary and if possible

Liquid substance

flush with copious amounts of water for at least 20 minutes transport and continue flushing if necessary and if possible

If Inhalation:

Reconsider Self Contained Breathing Apparatus
Remove victim from source ensuring there is no danger to personnel
Oxygen 100 % and airway maintenance appropriate to patients condition (intubate p.r.n.)

ADULT ENVIRONMENTAL EMERGENCY

Drug Ingestion

A. Assessment

History of drug ingestion Level of consciousness (Alert, Verbal, Pain, Unresponsive) Identify cardiac rhythm if suspected cardiotoxin, unconscious, or hypotensive

B. Treatment - Standing Order

- 1. Protect yourself from toxin and/or unruly patient.
- 2. Oxygen 100% and airway maintenance appropriate to patient's condition.
- 3. Monitor E.K.G.
- 4. I.V. access K.V.O.
- 5. Obtain Blood Sugar Level and treat accordingly.
- 6. Consider Valium 4 5 mg IV if patient is having seizures.

Notes: If patient is unconscious and hypotensive, respiratory depression and bradycardic, Narcan 2 mg IV is indicated.

If patient is unconscious and vitals are stable, treat with oxygen, protect airway and transport.

If patient is agitated to the potential of harm to himself or others, Valium 5 mg IV is indicated.

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ADULT ENVIRONMENTAL EMERGENCY

Hyperthermia

A. Assessment

History of exposure to warm temperature

Usually seen with increased exertion

Febrile

May have hot and dry skin or may have warm and moist skin

May be hypotensive

Determine if history of drug abuse exists

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. Remove clothing, cover with wet linen, expose to circulating air, and cool
- 3. Ringers Lactate K.V.O. and Monitor E.K.G.
- 4. If patient remains tachycardic or hypotensive, increase I.V. rate to 500 cc/hr
- 5. Massage extremities to prevent cold induced vasoconstriction

Remember: Time is of the essence in decreasing the patient's body temperature. Do not

delay transport for cooling in the field.

Note: Hyperthermia may be caused by one of the following:

Phenothiazine such as Thorazine

Cyclic antidepressants such as: Elavil, Norpramin, Tofranil

Amphetamine

Monoamine oxidase inhibitors such as: Nardil, Marplan

Anticholinergic drugs such as: Atropine, Cogentin, Scopolamine

Illicit drugs: Cocaine, PCP, LSD

ADULT ENVIRONMENTAL EMERGENCY

Hypothermia

A. Assessment

History of exposure to cold temperature

Altered level of consciousness

Bradycardia

Hypotension

Core temperature below 94 degrees F

Examine for associated trauma

Obtain Blood Glucose level

B. Treatment - Standing Order (Handle gently, slightest jolt may trigger V-Fib.)

If Unconscious and Pulseless, Evaluate for One Full Minute

- 1. CPR 100 % oxygen. (Do not perform C.P.R. if P.E.A. rhythm exists)
- 2. Identify cardiac rhythm, go to appropriate treatment protocol if temperature is greater than 85 degrees F.
- 3. Remove wet clothing and cover with blankets
- 4. I.V. N.S. @ 75 cc/hr warmed if possible
- 5. Obtain Blood Sugar and treat according to hypoglycemia protocol
- 6. Contact Medical Control

If Fibrillating and Core Temperature is Less than 85 degrees F

Defibrillate @ 200 / 300 / 360 joules, continue C.P.R. if unsuccessful

Intubate, I.V. N.S. K.V.O.

Withhold I.V. medications and transport

If Fibrillating and Core Temperature is Greater than 85 degrees F

Go to Ventricular Fibrillation Protocol

ADULT ENVIRONMENTAL EMERGENCY

Hypothermia - Continued

If Fibrillation Converts

Lidocaine 1.5 mg/kg I.V.P. q 3-5 minutes up to 3 mg/kg max. Lidocaine 2 gm/500 cc I.V. admin run @ 2 - 4 mg/min (titrate) Place patient in warm area

If Greater than 30 minute Transport Time

Add heat via warm external objects to head, neck, chest, and groin Do Not Warm Extremities

If asymptomatic, (none of the above conditions exist)

Transport gently

ADULT ENVIRONMENTAL EMERGENCY

Near Drowning

A. Assessment

History compatible with drowning Suspect hypothermia in "cold water" drowning Suspect cervical spine injury

B. Treatment - Standing Order

- 1. Remove from water, clear airway while protecting C-spine.
- 2. Oxygen 100 % and airway maintenance appropriate to patient's condition (intubate p.r.n., Heimlich Maneuver may be indicated for airway obstruction). If gastric distention interferes with ventilation, decompression of stomach may be required.
- 3. Patient should be quickly dried and placed on a dry surface before defibrillating to prevent injury to rescuer performing defibrillation.

<u>If Unconscious and Pulseless</u>

C.P.R. 100 % Oxygen

Evaluate cardiac rhythm and go to appropriate treatment protocol

If Fibrillating and Body Temperature Normal

Go to Ventricular Fibrillation Protocol

If Hypothermic

Go to Hypothermia Protocol

ADULT ENVIRONMENTAL EMERGENCY

Poisonous Snake Bite

A. Assessment

Protect yourself from danger of exposure of snake bite. Snakes can envenomate up to one hour after death.

Determine type of snake, time of bite, and changes in signs and symptoms since occurrence. The number of puncture marks is not diagnostic

B. Treatment - Standing Order

- 1. Remove rings and bracelets from patient
- 2. Oxygen and airway maintenance appropriate to patient's condition (intubate p.r.n.)
- 3. I.V. L.R. K.V.O. to maintain blood pressure or if hypotensive
- 4. Immobilize affected area keeping extremities in neutral position
- 5. Allay (relieve) anxiety and keep patient at rest
- 6. Mark progression of swelling at the time of initial assessment and q 5 minutes

C. Treatment - Protocol

1. Valium is indicated if anxiety is overwhelming - Contact Medical Control FIRST

ADULT ENVIRONMENTAL EMERGENCY

Known Cyanide Poisoning

A. Assessment

May occur through inhalation from combustion of materials that contain nitrogen including but not limited to:

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plastic furnishings
wool
silk
carpeting
synthetic rubber
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May also be absorbed across the skin. Cyanide is one of the most rapidly acting and most deadly poisons. May complain of headache, palpitations or dyspnea, confusion or stupor respirations may rapid and labored early on, but become slow and gasping pulse is usually rapid and thready may also see complaint of vomiting, seizures and coma

B. Treatment - Standing Order

- 1. Remove the patient to a non-contaminated area
- 2. Oxygen 100 % appropriate to patient's condition (intubate p.r.n.)
- 3. I.V. N.S. (large bore catheter)
- 4. Remove any clothing that is contaminated by cyanide & wash off any cyanide which may be present on the skin
- 5. Keep patient warm / monitor E.K.G.
- 6. Initiate immediate transport as soon as possible

C. Treatment - Protocol

If the patient is breathing, break an ampule (perle) of Amyl Nitrite Inhalant and hold it one inch in front of patient's mouth and nostrils for 15 seconds followed by a rest for 15 seconds, then reapply for 30 seconds each minute until I.V. lines are established. Oxygen may be used simultaneously with ventilation and should be continued throughout remainder of protocol. You will need to advise Medical Control that we do not presently carry the Amyl Nitrate Inhalants.

ADULT MEDICAL EMERGENCY

Acute Pulmonary Edema

A. Assessment (Any of the following may be present)

Focus assessment on Airway, Breathing, and Circulation

Dyspnea / Cyanosis

Diaphoresis

Erect Posture

Distended Neck Veins

Bilateral Rales / Wheezes

Tachycardia

History of C.H.F. or other heart disease

Renal Dialysis

Lasix, Digoxin, ACE Inhibitor on medication list

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient's condition
- 2. Evaluate cardiac rhythm and vital signs
- 3. Nitroglycerine 1 metered dose spray unless hypotensive
- 4. Albuterol Inhalation Treatment, 2.5 mg Albuterol / 3 ml NS via updraft with 7 10 LPM Oxygen
- 5. INT or I.V. N.S. K.V.O.
- 6. Lasix 40 mg I.V.

C. Treatment - Protocol

Contact Medical Control, consider:

Repeat Albuterol prn

Repeat Lasix prn

Dopamine 400 mg/500 cc D5W I.V. admix, begin @ 15 cc/hr (titrate) if patient is hypotensive.

Morphine Sulfate (as prescribed only by medical control)

ADULT MEDICAL EMERGENCY

Cerebrovascular Accident (C.V.A.)

A. Assessment

Altered level of consciousness (coma, stupor, confusion, seizures, delirium)

Intense or unusually severe headache of sudden onset or any headache associated with decreased level of consciousness or neurological deficit; unusual and severe neck or facial pain

Aphasia (incoherent speech or difficulty understanding speech)

Facial weakness or asymmetry (Paralysis of the facial muscles, usually noted when the patient speaks or smiles); may be on the same side or opposite side from limb paralysis Incoordination, weakness, paralysis, or sensory loss of one or more limbs; usually involves one half of the body particular the hand

Ataxia (poor balance, clumsiness, or difficulty walking)

Visual loss (monocular or binocular); may be a partial loss of visual field

Dysarthria (slurred or indistinct speech)

Intense vertigo, double vision, unilateral hearing loss, nausea, vomiting, photophobia, or phonophobia

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. Evaluate cardiac rhythm and vital signs
- 3. Monitor airway due to decreased gag reflex and increased secretions
- 4. Keep head elevated if possible, monitor pupils
- 5. Maintain body heat, protect affected limbs from injury, anticipate seizures
- 6. INT or I.V. N.S. K.V.O.
- 7. If blood sugar is less than 40 mg%: Dextrose 12.5 gm I.V.P. (1/2 amp only)
- 8. Be careful not to lower blood pressure

C. Treatment - Protocol

1. Contact Medical Control for treatment of Blood Pressure in CVA

ADULT MEDICAL EMERGENCY

Hyperglycemia Associated with Diabetes

A. Assessment

History of onset

Altered level of consciousness

Pulse: tachycardia, thready pulse

Respirations (Kussmaul-Kien - air hunger)

Hypotension

Dry mucous membranes

Skin may be cool (consider hypothermia)

Ketone odor on breath

Abdominal pain, nausea and vomiting

History of polyuria, or polydipsia (excessive urination or thirst)

B. <u>Treatment</u> - Standing Order

- 1. Oxygen at flow rate appropriate to patient's condition
- 2. I.V. N.S. K.V.O. and evaluate cardiac rhythm
- 3. Transport

ADULT MEDICAL EMERGENCY

Hypertensive Crisis

A. Assessment

Headache, blurred vision, dizziness, weakness.

Elevated blood pressure (systolic and/or diastolic){if systolic BP is greater than 260 mmHg and/or Diastolic BP is greater than 140 mmHg}.

Dyspnea, peripheral or pulmonary edema.

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient condition and elevate head
- 2. INT or I.V. N.S. K.V.O.

if you treat the blood pressure with medications - IV Fluid if you treat the blood pressure without medications - INT is preferred

3. Evaluate cardiac rhythm for dysrhythmias and treat appropriately with medical direction

C. Treatment - **Protocol**

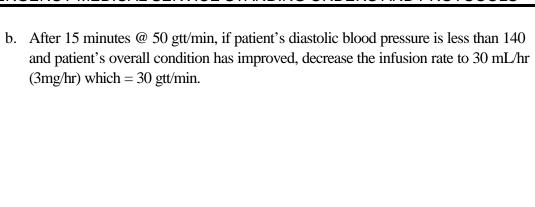
If diastolic blood pressure is 140 mmHg or greater AND the patient is symptomatic, request order for Cardene IV.

AFTER order has been granted by Medical Control for Cardene I.V., your standing order for the admixture and administration for Cardene I.V. is:

- 1. Continue with oxygen, cardiac monitor and reassessment of patient.
- 2. Establish IV
- 3. Mix 12.5 mg (5ml) of Cardene IV into 125 ml Normal Saline using a Solutrol either as a piggy back to initial IV as a secondary IV. Always use a 60 gtt/set. Run IV at 50 ml/hr (5.0 mg/hr) = 50 gtt/min
 - a. After 15 minutes @ 50 gtt/min, if patient's diastolic blood pressure is still 140 or greater and the patient is symptomatic (unstable), increase Cardene IV rate to 75 mL/hr (7.5 mg/hr) which equals 75 gtt/min. Re-evaluate patient's diastolic blood pressure every 3 5 minutes. If pt's diastolic BP drops below 140 and patient's overall condition improves, decrease the infusion rate to 30 mL/hr (3 mg/hr) which = 30 gtt/min.

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ADULT MEDICAL EMERGENCY

Hypoglycemia

A. Assessment

History of onset in minutes

History of Insulin excess (overdose, missed meal, exercise, vomiting, or diarrhea)

Confusion, agitation, headaches, or comatose

Pulse Rate (normal to tachycardia)

Respirations (shallow, slow)

Skin (sweaty, often cool)

Flaccid muscle tone

Grand Mal seizures

Fecal, urinary incontinence

Continually monitor vital signs

Cardiac monitor if comatose

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient's condition. Monitor E.K.G.
- 2. Obtain blood glucose level.

If blood sugar is 40 mg% or greater and pt. is asymptomatic:

establish IV NS @ KVO, monitor and transport

If blood sugar is less than or greater than 40% and sympomatic:

establish IV D5W @ 250 cc bolus* then KVO

reassess blood sugar level

If blood sugar is still less than or greater than than 40% and symptomatic:

administer Dextrose 25 gm I.V.P. or oral glucose depending

on patient's level of consciousness and re-evaluate

Caution: *Do not administer bolus if patient is also experiencing or has history of CHF, Pulmonary Edema, or Renal Dialysis or other fluid overload conditions

3. Transport is indicated unless the alert and awake patient refuses. However, the patient is to be encouraged to be transported to the ED for further evaluation.

C. Treatment - Protocol

Consider additional administration of Dextrose 25 gm, IVP

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ADULT MEDICAL EMERGENCY

Respiratory Distress (Asthma/COPD)

A. Assessment

Hx - COPD, Emphysema, Asthma, or other restrictive lung disease Respiratory rate greater than 30 per minute or less than 8 per minute Labored respiration, use of accessory muscles or tripoding Breath Sounds: Bilaterally diminished, dry crackles, wheezing Cyanosis

B. Treatment - Standing Order

- 1. Oxygen administration as needed, EKG, Vitals, consider intubation
- 2. Transport
- 3. Albuterol Inhalation Treatment 2.5 mg / 3 ml NS and O2 setting @ 7 10 LPM Repeat Albuterol PRN
- 4. INT or IV Normal Saline TKO

C. Treatment - Protocol

Consider:

Epinephrine 1:1000, 0.3 cc SQ if patient has no history of V-Tach

ADULT MEDICAL EMERGENCY

Seizures

A. Assessment

Seizure (onset, duration, type, post-seizure, level of consciousness)

Medical (head trauma, diabetes, headaches, drugs, alcohol, seizures)

Physical (seizure activity, level of consciousness, incontinence, head and mouth trauma, vital signs)

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. INT or I.V. N.S. K.V.O. and evaluate cardiac rhythm
- 3. Obtain blood sugar level and treat accordingly then reassess
- 4. Rule out head injury do not administer narcotics to head injured patients
- 5. Valium 5 10 mg SLOW IV is indicated when actively seizing titrate until seizure stops or max. 30 mg has been administered

CAUTION: Give slowly in 5 mg increments q 5 minutes until seizure has stopped or maximum of 30 mg has been administered.

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C. Treatment - Protocol

Contact Medical Control for notification of arrival if patient is still actively seizing.

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ADULT MEDICAL EMERGENCY

Unconscious / Unresponsive

A. Assessment

Altered level of consciousness with vital signs (no known cause, BP > and/or = 100 mmHg systolic)

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition and evaluate cardiac rhythm
- 2. I.V. N.S. K.V.O.
- 3. Obtain blood glucose level and treat accordingly

C. Treatment - **Protocol**

Contact Medical Control for other appropriate treatment modalities PRN.

Note: Assess for head trauma, hypothermia, hemiparesis, and fever

ADULT MEDICAL EMERGENCY

Avulsed Teeth- Standing Order

Avulsed teeth may be handled in much the same manner as small parts; i.e. rinse in normal saline (do not rub or scrub) and place in moistened gauze, but there is no need to cool with ice.

Reimplantation is recommended if possible at the scene as this creates maximum possibility of re-attachment as minutes count. The following guidelines pertain to reimplantation at the scene:

Applicable only for permanent teeth (i.e., with patients over 6.5 years of age)

Applicable when only one or two teeth are cleanly avulsed and the entire root is present

Applicable only to anterior teeth (front 6, upper or lower)

The patient must be conscious

Should be attempted within the first 30 mins.; the sooner, the greater success rate

Do not force reimplantation. Gentle insertion is all that is necessary. Slight incorrect positioning can be corrected later.

If reimplantation is not feasible and the patient is a fully conscious adult, then the best procedure is to place the tooth in the mouth, either under the tongue or in the buccal vestibule. This is not recommended in children.

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ADULT SHOCK / TRAUMA

Anaphylactic Shock

A. Assessment - Severe Reaction

Contact with a known allergen or with substances that have a high potential for allergic reactions.

Sudden onset with rapid progression of symptoms.

Dyspnea, audible wheeze on confrontation, generalized wheeze on auscultation, decreased air exchange on auscultation.

Generalized urticaria, erythema, angioedema especially noticeable to face and neck.

Complaint of chest tightness or inability to take a deep breath.

B. Treatment - Standing Order

- 1. Position of comfort, reassure
- 2. O2, cardiac monitor, and consider intubation
- 3. Epinephrine 1:1000 0.3 mg SQ
- 4. IV NS or LR, large bore @ KVO
- 5. **If patient is **seriously compromised** and a vein is readily available, 0.3 mg of Epinephrine 1:10,000 should be administered IVP. This may be repeated once with the subsequent dose being 0.5 to 1.0 mg. This is especially useful in the late stages of shock when peripheral perfusion is poor.**
- 6. Diphenhydramine (Benadryl) 50 mg IV or deep IM
- 7. Albuterol Inhalation Treatment if wheezing is present and persists post Epinephrine SC/IV
- 8. Begin transport as soon as possible

**Note: (#5) This standing order should be utilized if the patient is severely compromised.

Do not use this order if the patient has only mild symptoms or is experiencing a localized reaction unless orders are given by medical control.

ADULT SHOCK / TRAUMA

Cardiogenic Shock

A. Assessment

Frequently associated with tachy/brady dysrhythmia, acute MI, or blunt chest trauma

Neck vein distention in sitting position

Moist sounding lungs (rales, rhonchi)

Peripheral edema (if chronic heart failure)

Determine if cardiac dysrhythmia exists

Consider tension pneumothorax

Consider cardiac tamponade

B. Treatment - Standing Order

- 1. Semi-Fowlers or position of comfort
- 2. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 3. Evaluate cardiac rhythm
- 4. I.V. N.S. with large bore catheter
- 5. 500cc I.V.P. if BP remains low (systolic BP below 90)

C. <u>Treatment</u> - **Protocol**

Contact Medical Control, consider:

Dopamine 400 mg/500 cc D5W I.V. admix, begin @ 15 cc/hr (titrate)

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ADULT SHOCK / TRAUMA

Multi-System Trauma - Standing Order

- 1. Evaluate Mechanism of Injury and incorporate in the patient care scheme ABC's, Spinal immobilization, and consider PASG accordingly
- 2. Control hemorrhage.
- 3. If in cardiac arrest, bilateral needle chest decompression may be indicated.

Chest Decompression is only indicated here **if** the patient has a mechanism of injury that may suggest chest injury. These include MVA, Falls (other than same level falls), penetrating trauma with signs and symptoms of Pneumothorax.

If in doubt, contact Medical Control.

- 4. High Flow, 100% Oxygen concentration and intubate PRN.
- 5. EKG
- 6. Transport as soon as possible: Scene time should be limited to 10 12 minutes.
- Initiate two large bore (14 or 16 gauge angiocath) Lactated Ringers IV's enroute.
 Rate to maintain patient's systolic blood pressure 80 100 mmHg.
 Do not stay on the scene initiating IV's unless patient is pinned in vehicle, or prolonged scene time is unavoidable.
- 8. Notify the receiving hospital of patient condition ASAP.
- 9. Avoid narcotic administration.
- 10. ABC management and reassessment, including suction PRN.

ADULT SHOCK / TRAUMA

Air Ambulance Transport

DO NOT call for air ambulance transport if patient is in traumatic cardiopulmonary arrest. If the patient has no vital signs, they are a trauma full-arrest.

A scene flight by air ambulance MAY be indicated IF:

The Level - I trauma patient's condition warrants immediate and extreme action **and** the extrication **and / or** transport time is greater than 30 minutes **and** if patient **is not** in trauma full arrest.

Transport time is defined as the length of time beginning when the emergency unit leaves the scene transporting until time of arrival at the emergency department.

ADULT SHOCK / TRAUMA

Hypovolemic Shock

A. Assessment

Blood loss due to penetrating injuries to torso or other major vessel

Fx of femur or pelvis

G.I. bleeding, vaginal bleeding, or ruptured ectopic pregnancy

Dehydration caused by vomiting, diarrhea, inadequate fluid intake, excessive fluid loss due to fever, uncontrolled diabetes, or burns

Pulse may be greater than 120 beats per minute

Blood pressure may be less than 90 mm Hg systolic

Orthostatic (Tilt) changes in vital signs (consider possible spinal injury) pulse increase of 20 beats per minute B/P decrease of 10 mm Hg systolic

Severe shock (hypovolemia) is defined as decreased level of consciousness, absent radial pulse, capillary refill greater than 2 seconds, no palpable blood pressure

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition. Monitor cardiac rhythm and vital signs
- 2. Consider positioning PASG trousers on patient, but do not inflate. Consider patient's chances of survival without the suit.
- 3. I.V. L.R. x 2 large bore titrated to only maintain patient's systolic blood pressure 80 100 mmHg

C. Treatment - Protocol

Contact Medical Control, consider:

Inflation of PASG, if blood pressure can not be maintained with I.V. therapy

ADULT SHOCK / TRAUMA

Neurogenic Shock

A. Assessment

Associated with spinal cord injuries and overdoses Signs of hypovolemic shock without peripheral vasoconstriction (warm shock)

B. Treatment - Standing Order

- 1. Secure spine and airway
- 2. Oxygen 100 % and control A.B.C.'s
- 3. Primary I.V. access with large bore catheter bolus 10 cc/kg N.S. or L.R.
- 4. Secondary I.V. access with large bore catheter K.V.O. Normal Saline or L.R. to maintain pt's systolic BP 80 100 mmHg
- 5. Dopamine 400 mg/500 cc D5W I.V. admix, begin @ 15 cc/hr and titrate if perfusion is not restored

Special Note: Consider occult bleeding and treat as Hypovolemic Shock Protocol.

ADULT SHOCK / TRAUMA

Septic Shock

A. Assessment

Cool, clammy skin Poor capillary refill Tachycardia / Hypotension Potential for underlying infection

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. I.V. L.R. x 2 large bore titrated to maintain pt's systolic blood pressure 80 100 mmHg
- 3. Check blood sugar, treat appropriately and avoid heat loss
- 4. If blood pressure remains low, L.R. 500 cc fluid I.V.P., re-evaluate.
- 5. If no change, contact medical control

C. Treatment - Protocol

1. Dopamine 800 mg/500 cc D5W I.V. admix, begin drip @ 15cc/hr (titrate) after bolus of one or two liters of IV Lactated Ringers is given

Note: Be particular of Body Substance Isolation precautions.

ADULT SHOCK / TRAUMA

Major Thermal Burn

Major Burn: Greater than 20 % body surface involvement

Greater than 10% full thickness burn

Full thickness burns of the head, face, feet, or perineum

Inhalation burns or electrical burns

Burns complicated by fractures or other significant injury

Elderly, pediatric, or compromised patients

A. Assessment

Look for burns of the nares, oropharyngeal mucosa, face or neck

Listen for abnormal breath sounds

Note if burn occurred in closed space

Determine extent of injury (including associated injuries)

Remove clothing from affected parts

Cardiac monitor all major burn patients

Nasotracheal Intubation is preferred route of intubation for burn patients

Do Not Use Ice Under Any Circumstances!

B. Treatment - Major Burns - Standing Order

- 1. Stop the burn process and provide Oxygen 100 % and airway maintenance appropriate to patient's condition. Be prepared to intubate. Edema will cause patient's airway to close almost instantly and without significant signs.
- 2. Monitor all vital signs and continue reassessment including, but not limited to, respiratory rate, peripheral pulses and circulation, level of consciousness, and EKG rhythm and rate.
- 3. Remove rings, necklaces, anklets, and clothing
- 4. Cover burned area with dry sterile dressing or burn sheet. DO NOT use Waterjel or any other commercially manufactured burn products.
- 5. I.V. L.R. x 2 large bore at a combined rate of 500 cc/hr. DO NOT delay initiation of transport attempting IV access.

*If Rule of Nine's BSA % can be readily obtained, administer IV fluids @ 3 - 4 cc of LR / KG / % BSA

ADULT SHOCK / TRAUMA

Major Thermal Burn - continued

*If rule of Nine's BSA % can not be readily obtained, administer IV fluids using the following guide:

500 ml per hour for patients over 15 years old 250 ml per hour for patients 5 - 15 years old 150 ml per hour for patients under 5 years old

Excessive or over aggressive amounts of fluid administration may increase third spacing shock.

- 6. Stadol 2 4 mg IV PRN
- 7. Stabilize all associated injuries (eg. chest, potential spine injury, fractures, dislocations, etc.)
- 8. DO NOT transport patients on wet sheets, wet towels or clothing

C. Treatment - Protocol

Contact Medical Control, consider:

Stadol 2 - 8 mg I.V. Morphine Sulfate 5 - 15 mg IV Nitrous Oxide - if available

ADULT SHOCK / TRAUMA

Trauma Treatment Priorities

A. Treatment - Standing Order

- 1. Stabilize C-spine p.r.n., evaluate and consider mechanism of injury
- Oxygen 100 % and airway maintenance appropriate to patient's condition hyperventilate if necessary
- 3. Consider PASG do not inflate at this point
- 4. Initiate transport utilizing the current TN Trauma Destination Guidelines
- Certain situations require rapid transport. Non-lifesaving procedures such as splinting and bandaging must not hold up transport. The following are but may not be limited to critical situations that require immediate transport.
 - airway obstruction that cannot be quickly relieved by mechanical methods such as suction, forceps, or intubation
 - traumatic cardiopulmonary arrest
 - large open chest wound (sucking chest wound)
 - large flail chest
 - tension pneumothorax
 - major blunt chest trauma
 - shock
 - head injury with unconsciousness, unequal pupils, or decreasing level of consciousness
 - tender abdomen
 - unstable pelvis
 - bilateral femur fractures
- 6. I.V. L.R. x 2 large bore maintain systolic blood pressure 80 100 mmHg
- 7. Protect against heat loss
- 8. Monitor vital signs and neuro status enroute:

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critical patients - reassess every 3 - 5 minutes
non-critical patients - reassess every 8 - 10 minutes and prn
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B. Treatment - **Protocol**

Contact Medical Control if systolic B/P is less than 90 mm Hg without resultant IV Fluid therapy for orders to inflate PASG

ADULT SHOCK / TRAUMA

Traumatic Tension Pneumothorax

A. Assessment:

Acute Respiratory Distress, Cyanosis

Unilaterally decreased breath sounds or absent breath sounds

Hyper-Resonance of chest unilaterally

Juglar Vein Distention

Subcutaneous Emphysema

Acute Traumatic chest injury, ecchymosis or obvious rib fractures

History of COPD or other chronic lung disease which predisposes patient to spontaneous pneumothorax

Hypotension

Tracheal Deviation away from the affected side

Chest Decompression, Hypotension, Arrhythmias

Patient must meet <u>AT LEAST THREE</u> of the above assessment findings to qualify for this standing order, otherwise, contact Medical Control.

B. Treatment - Standing Order

- 1. Consider institution of multi-system trauma standing order if indicated. Remember this order may be necessary for medical patients, as well.
- 2. Primary Site: Insert a 14 gauge, 2 1/4 inch IV catheter on affected side, 5th

intercostal space, mid-axillary line on the affected side of the chest

between the 5th and 6th rib.

Optional Site: 2nd intercostal space mid-clavicular line on the affected side of the chest between the 2nd and 3rd rib.

- 3. Evaluate breath sounds throughout remainder of the transport.
- 4. Follow trauma treatment priorities PRN.

OBSTETRICAL EMERGENCIES

Normal Delivery

- A. Treatment Standing Order
- 1. Oxygen at flow rate appropriate to patient's condition
- 2. I.V. L.R. K.V.O. if patient in active labor defined as regular contractions q 3 5 mins. with 30 60 second duration.
- 3. When head delivers suction airway (mouth first then nose) & check for cord around neck
- 4. After delivery clamp cord @ 8 and 10 inches and cut between clamps
- 5. Dry infant and wrap to keep warm. Maintain airway, suction PRN
- 6. Check A.P.G.A.R. Score at 1 and 5 minutes after delivery
- 7. DO NOT allow mother to nurse until both have been evaluated in the Emergency Department
- 8. Allow placenta to deliver

massage uterine fundus (lower abdomen) observe and treat signs of shock with increased delivery of oxygen and I.V. fluids be alert to the possibility of multiple births

B. Considerations:

Any vaginal bleeding during the third trimester of pregnancy must be regarded as a dire medical emergency until proven otherwise.

Record a blood pressure and the presence or absence of edema in every pregnant woman you examine -- no matter what the chief complaint.

The greatest risks to the newborn infant are airway obstruction and hypothermia. Keep the infant warm, dry, covered, and the infant's airway maintained with a bulb syringe. Always remember to squeeze the bulb prior to insertion into the infant's mouth or nose.

The greatest risk to the mother is post-partum hemorrhage. Watch closely for signs of hypovolemic shock and excessive vaginal bleeding.

Consider the possibility of pregnancy in any female of childbearing age with complaints of vaginal bleeding, menstrual cycle irregularity, abdominal pain, cramping, or low back pain not associated with a traumatic injury.

Spontaneous or induced abortions may result in copious vaginal bleeding. Reassure the mother, elevate legs, treat for shock, and transport.

OBSTETRICAL EMERGENCIES

Apgar scoring

Clinical Sign	<u>0 Points</u>	1 Point	2 Points
Appearance	Blue/Pale	Body Pink Extremities Blue	Completely Pink
Pulse	Absent	Below 100/minute	Above 100/minute
Grimace	No response	Grimace	Cries
Activity	Limp	Some flexion of extremities	Action Motion
Respiratory	Absent	Slow/Irregular	Good strong cry

The Apgar Score should be calculated after birth of the infant. The five (5) clinical signs are evaluated according to the scoring system detailed above. Each sign is assigned points to be totaled. A total score of 10 indicates that the infant is in the best possible condition. A score of 4 to 6 indicates moderate depression and a need for resuscitative measures.

 \boldsymbol{DO} NOT delay resuscitation efforts to obtain APGAR score . Obtain APGAR as soon as possible.

OBSTETRICAL EMERGENCIES

Breech or Limb Presentation

- A. <u>Breech Presentation Treatment Standing Order</u>
 - 1. Oxygen at flow rate appropriate to patient's condition
 - 2. I.V. L.R. K.V.O.
 - 3. Allow the delivery to progress spontaneously DO NOT PULL!
 - 4. Support the infant's body as it delivers
 - 5. If the head delivers spontaneously, deliver the infant as noted in 'Normal Delivery'
 - 6. If the head does not deliver within 3 minutes, insert a gloved hand into the vagina to create an airway for the infant
 - 7. Transport immediately and DO NOT remove your hand until relieved by hospital staff
- B. <u>Limb Presentation</u> <u>Treatment Standing Order</u>
 - 1. Oxygen 100 % and appropriate to patient's condition
 - 2. I.V. L.R. K.V.O.
 - 3. Place mother in Trendelenburg Position
 - 4. Transport immediately
 - 5. Contact Medical Control as soon as possible.
- C. If either case exists, Medical Control must be contacted prior to arrival for notification and further orders if so desired by Medical Control.

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OBSTETRICAL EMERGENCIES

Prolapsed Umbilical Cord

A. Assessment

Cord emerges from the uterus ahead of the baby

With each uterine contraction the cord is compressed between the presenting part and the pelvis.

The baby's oxygen supply is morbidly reduced

Treatment of prolapsed cord is clearly urgent

B. <u>Treatment - Standing Order</u>

- 1. Oxygen 100 % and appropriate to patient's condition. Initiate an I.V. large bore L.R. at appropriate rate as soon as possible.
- 2. Position the mother supine with her hips elevated as much as possible on pillows.
- 3. Instruct mother to pant with each contraciton, which will prevent her from bearing down.
- 4. Insert a gloved hand into the vagina and gently push the infant's head off of the cord.
- 5. While you maintain pressure on the presenting part, have your partner or assistant cover the exposed cord with a sterile dressing moistened in saline.
- 6. Transport immediately and Do Not remove your hand until relieved by hospital staff.
- 7. Contact Medical Control as soon as possible if time and patient condition allows.

OBSTETRICAL EMERGENCIES

Pre-eclampsia and Eclampsia

A. Assessment

usually begins after the twentieth week of pregnancy
most often affects women during their first pregnancy
may have a history of chronic hypertension and/or diabetes
may experience hypertension and edema
may experience headaches, blurred vision, and abdominal pain
may experience seizures which indicates a progression from pre-eclampsia to eclampsia

B. Treatment - Standing Order

- 1. 100% O2 via non-rebreather, vitals, and cardiac monitor any blood pressure greater than 130/80 should be reported to medical control.
- 2. place pt. in recumbent position on her left side.
- 3. establish IV LR or NS, large bore @ KVO
- 4. initiate immediate but gentle as possible transport

C. Treatment - Protocol

1. Contact medical control and consider:

Valium 5 mg slow IV PRN in anticipation of status seizures

<u>Note</u>: Record a blood pressure and the presence or absence of edema in every pregnant woman you examine -- no matter what the chief complaint.

MISCELLANEOUS

Discontinuation of Life Support

Once life support has been initiated in the field, the fire fighter paramedic may contact Medical Control for permission to discontinue life support if:

- 1. Asystole or agonal pattern is present on the E.C.G, and
- 2. The patient has fixed, dilated pupils, and
- 3. There is absence of pulse, respirations, and neurological reflexes.
- 4. **ALL** of the above items must be present.

In addition to:

- a. the E.M.S. provider documented lack of C.P.R. for 10 minutes, or
- b. prolonged resuscitation in the field without hope for survival, or
- c. other signs of death are present in the absence of hypothermia, cold water drowning, lighting strikes, or barbiturate induced coma, **or**
- d. massive trauma such as evacuation of cranial vault, etc., or
- e. severe blunt trauma with absence of vital signs and pupillary response.
- f. ANY item a e WITH ALL of items 1 3 must be present for consideration of discontinuation of life support.

MISCELLANEOUS

Terminally Ill Patients

- 1. Maintain a calm environment and avoid performing measures beyond basic life support.
- 2. Elicit as much information from persons present who are familiar with the patient's condition as possible.
- 3. Get the name and telephone number of the patient's physician if possible.
- 4. Maintain B.L.S. procedures and contact Medical Control as soon as possible. Provide full information on the patient's present condition, history, and the name of the patient's physician and telephone number.
- 5. Medical Control will direct management of the call.

MISCELLANEOUS

Withholding of Life Support - Standing Order

Life support may be withheld in any of the following circumstances:

- 1. Obviously dead patients with dependent lividity, rigor mortis, or massive trauma such as evacuation of the cranial vault.
- 2. Obviously dead patients with tissue decomposition.
- 3. Patients without vital signs who cannot be accessed for treatment due to entrapment for prolonged time.
- 4. Severe blunt trauma with absence of vital signs and pupillary response.
- 5. When presented a valid <u>Do Not Resuscitate Order</u> as approved by the Tennessee Department of Health.

MISCELLANEOUS

I.V. Sites- Standing Order

The preferred site for an I.V. is the hand followed by the forearm and antecubital and is dependent on the patient's condition and treatment modality.

In the event that an I.V. cannot be established, and the I.V. is considered critical for the care of the patient, other peripheral sites may be used, i.e. external jugular, feet, legs.

The intraosseous site may be used in pediatric patients six years old or younger in whom I.V. access cannot be established within 3 attempts or 90 seconds when I.V. access is critical.

Pediatric Drug Dosing - Standing Order

The length based resuscitation system (Broselow tape) is an appropriate device to determine drug doses in pediatric patients.

Neonatal Epinephrine Dose - Standing Order

The dose of epinephrine is 0.01 mg/kg (0.1 cc/kg of 1:10,000) given q 3 - 5 minutes. This includes the initial dose endotracheally.

If no I.V. available, may give epinephrine 0.1 mg/kg of 1:1,000 E.T. if neonate does not respond to initial dose.

Nasotracheal Intubation - Standing Order

When preparing to N.T. intubate, neo-synephrine 0.25 % may be sprayed two (2) times in each nostril unless the patient is hypertensive, if available.

Nasotracheal intubation is contraindicated in facial trauma.

MISCELLANEOUS

Intravenous Fluid Administration

Any patient having a condition that requires an IV or INT may receive it if the paramedic deems it necessary. Weigh the transport time against the time it would take to start an IV and make a good decision.

Standing Order:

Trauma:

- 1. Do not spend time on scene attempting IV's on multiple or critical trauma patients. IV's are to be started while enroute to the hospital unless the patient is pinned in vehicle or a prolonged scene time is unavoidable.
- 2. IV Lactated Ringers is for trauma patients. The rate is based on patient condition and shall be to maintain the patient's systolic blood pressure 80 100 mmHg.

Medical:

- 1. INT or IV Normal Saline for chest pain, cardiac arrest or other medical conditions requiring possible IV access. If IV access is all that is needed, the INT is preferred.
- 2. IV D5W is to be established when a blood glucose of less than 40 IU/L. Normal Saline is the fluid of choice when a blood glucose greater than 40 IU/L is determined. Refer to hypoglycemia protocol for complete treatment modality.

MISCELLANEOUS

Physician On-Scene

Standing Order:

- No one will be recognized as a physician without proof of license. This must be in the form
 of a wallet card or visual personal recognition. NO ORDERS will be accepted until proof
 of license is verified.
- 2. Consider need for Law Enforcement if any difficulty with person occurs.
- 3. Physician on scene may:
 - a. Assist the Fire Fighter Paramedic and allow you to operate under MFD standing orders and protocols.
 - b. Request to talk to Medical/Trauma Control to offer advice.
 - c. Take total responsibility for the care given and physically accompany the patient to the Emergency Department. This physician must also sign the Patient Care Report.
 Contact should be made with Medical/Trauma Control if this happens. Advise them of the situation.
- 4. If private physician intervenes by phone or in person the Fire Fighter Paramedic shall:
 - a. Request the physician contact Medical Control and relay any orders through them.
 - b. NO ORDERS should be taken over the phone from the private physician.

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MISCELLANEOUS

Other Health Care Providers on Scene - Standing Order

Any other Health Care Providers on scene must be identified as in the Physician on Scene Order. Other Health Care providers include but are not limited to:

R.N.

L.P.N.

Chiropractor

Anesthesist

Physical Therapist

Pharmacist

EMT

Paramedic

These personnel may offer to help. You may use them at your discretion. However, YOU will be responsible for their actions and treatments. They, as a general rule, should not perform invasive procedures. Remember, YOU are responsible for the patient. If an outside Health Care Provider is trying to take over direction of patient care, have Law Enforcement remove the person for "Obstruction of Emergency Services".

MISCELLANEOUS

Trauma Center Destination Guidelines

The current State of Tennessee Trauma Destination Guidelines shall be used in the transport decision scheme. In addition, the following should be observed:

When transport to a Trauma Center will exceed thirty (30) minutes, the patient will be transported to the closest appropriate medical facility unless otherwise dictated by regional or local destination guidelines. Medical Control supervision will have final jurisdiction over destination.

Any person of legal majority (age 18 or over) or the parent or legal guardian of any minor patient or any member of the patient's immediate family shall have the right to request transport to a specific destination. Transport of the patient to the requested destination shall not violate this rule and shall not constitute refusal of care, or neglect of the duty imposed by law on all emergency medical services personnel and providers if:

- a. The person making the decision is informed that Tennessee has a Trauma system which would, in his/her circumstances usually take him/her to another facility.
- b. The Trauma Center chosen as the patient's destination is overloaded and cannot treat the patient.
- c. The patient's condition is commensurate with the requested receiving facility's level of care.

If a patient's condition deteriorates during transport, such that the patient's life or health are in serious jeopardy if the requested or planned destination is pursued, or if Medical Control deems transport to a Level I Trauma Center may not be necessary, the patient may be transported to another appropriate facility and at the Fire Fighter Paramedic or Medical Control's discretion utilizing the Tennessee Trauma Destination Guidelines.

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PEDIATRIC CARDIAC EMERGENCY

Pulseless Electrical Activity (P.E.A.)

A. Assessment

Confirm rhythm with quick look paddles or electrodes

Presence of electrical cardiac rhythm without palpable pulse

Re-assess ventilation and oxygenation

Consider hypovolemia, hypoxemia, severe acidosis, profound hypothermia, cardiac tamponade, or tension pneumothorax as cause

B. Treatment - Standing Order

- 1. CPR and hyperventilate with 100 % Oxygen
- 2. Intubate and obtain IV/IO NS as soon as possible
- 3. Epinephrine 1:10,000 0.01 mg/kg I.V./I.O. minimum dose 1.0 ml or 0.1 mg/kg E.T. of 1:1:000 Epinephrine

Repeat Epinephrine q 3-5 minutes: I.V./I.O./E.T. 0.1- 0.2 mg/kg 1:1,000

Note: Give 0.01 mg/kg of 1:10,000 epinephrine for first dose I.V. / I.O.

Give 0.1 mg/kg of 1:1,000 epinephrine for first dose E.T.

Give 0.1 - 0.2 mg/kg of 1:1,000 epinephrine for all subsequent doses

4. I.V. N.S. K.V.O. large bore catheter or I.O.

C. Treatment - **Protocol**

Contact Medical Control, consider:

Sodium Bicarbonate 1 mEq/kg bolus I.V.

Narcan 0.1 mg/kg I.V.

Dextrose (D50) 1 cc/kg I.V. diluted 1:1 with N.S. to yield D25W

Fluid Challenge with N.S. or L.R.

PEDIATRIC CARDIAC EMERGENCY

Supraventricular Tachycardia (S.V.T.)

A. Assessment

If patient is in CHF, shock, hypotension, or altered mental status, utilize the unstable algorithm. SVT in children should be faster than 220 beats per minute.

Any wide complex tachycardia should be assumed to be ventricular.

The R to R interval should be regular.

B. Treatment

Stable Standing Order

- 1. Oxygen , INT or IV, cardiac monitor
- 2. Transport and contact Medical Control
- 3. Rule out hypoxia, acidosis, hypoglycemia, hypothermia

Protocol - Contact Medical Control

1. Request orders for Adenocard

Unstable:

- 1. Hyperventilate with 100% O2 w/BVM, EKG, IV or IO
- Adenocard 0.1 mg/kg IVP if IV access is already available. Max dose 6 mg. DO NOT delay cardioversion to initiate IV.
- 3. If no conversion in 2 minutes, administer 0.2 mg/kg Adenocard IVP/max dose 12 mg.
- 4. If no conversion in 2 minutes:, synchronized cardioversion 0.5 J/kg
- 5. Rule out treatable cause and treat accordingly
 - a. Hypoxia
 - b. Acidosis
 - c. Hypoglycemia
 - d. Hypothermia

Protocol -Contact Medical Control:

- 1. Synchronized cardioversion 1 j/kg
- 2. Synchronized cardioversion 2 j/kg
- 3. Transport as soon as possible

PEDIATRIC CARDIAC EMERGENCY

Bradycardia

A. Assessment

If asymptomatic, transport and observe.

Heart rate less than 100 beats per minute in infant, less than 80 beats per minute up to age 2, less than 60 beats per minute age 2 or older

Signs of decreased perfusion, hypotension, respiratory difficulty

Cardiac rhythm may be sinus bradycardia, junctional, or heart block

Treat symptomatic bradycardia aggressively and quickly before cardiac arrest occurs.

B. Treatment - Standing Order

- 1. Oxygen 100 %
- 2. Assist Ventilation
- 3. If after one minute of assisted ventilations with 100% O2, begin chest compressions if, despite oxygenation and ventilation if no pulse or if:

Heart rate < 80 / min in an infant

Heart rate < 60 / min in a child

- 4. I.V. or IO N.S. K.V.O.
- 5. Epinephrine q 3 5 mins. I.V./I.O. 0.01 mg/kg 1:10,000 E.T. 0.1 mg/kg 1:1,000
- 6. Atropine Sulfate 0.02 mg/kg I.V./E.T./I.O. rapidly minimum single dose 0.1 mg, max. single dose 0.5 mg for child max. single dose 1.0 mg for adolescent
- 7. Atropine may be repeated once: Child (< 8 yrs) 1.0 mg max. total dose Adolescent (> 8 yrs) 2.0 mg max. total dose

C. Treatment - **Protocol**



PEDIATRIC CARDIAC EMERGENCY

Ventricular Asystole

A. Assessment

Confirm pulselessness
Confirm cardiac rhythm with quick look paddles or electrodes
Switch leads to confirm Asystole and to rule out fine V-Fib

B. Treatment - Standing Order

- 1. C.P.R. with 100% Oxygen
- 2. Intubate and hyperventilate
- 3. Epinephrine 1:10,000 0.01 mg/kg I.V./I.O. min. dose 1.0 ml or 0.1 mg/kg E.T. of 1:1,000

Note: Give 0.01 mg/kg of 1:10,000 epinephrine for first dose I.V. / I.O. Give 0.1 mg/kg of 1:1,000 epinephrine for first dose E.T. Give 0.1 - 0.2 mg/kg of 1:1,000 epinephrine for all subsequent doses

- 4. I.V. N.S. K.V.O. or I.O.
- 5. Repeat Epi. q 3 5 mins; I.V./I.O./E.T. 0.1-0.2 mg/kg of 1:1,000

C. Treatment - Protocol

Contact Medical Control, consider:

Sodium Bicarbonate 1 mEq/kg bolus I.V. Dextrose (D50) 1 cc/kg I.V. diluted 1:1 with N.S. to yield D25W

PEDIATRIC CARDIAC EMERGENCY

Ventricular Fibrillation or Pulseless V-Tach

A. Assessment

Confirm cardiac rhythm with quick-look paddles or electrodes

V-Fib. by cardiac monitor only; not auto-sensing devices

Pulseless

If the suspected etiology of the V-Fib. is cocaine or crack ingestion or I.V.injection, contact Medical Control immediately.

B. Treatment - Standing Order

- 1. C.P.R. with 100 % oxygen
- 2. Check cardiac monitor and identify V-Fib or V-Tach w/o pulse
- 3. Defibrillate @ 2 joules/kg *
- 4. Defibrillate @ 4 joules/kg * (repeat twice if needed)
- 5. C.P.R. if no pulse
- 6. Intubate I.V. / I.O. N.S. K.V.O.
- 7. Epinephrine 1:10,000 0.01 mg/kg I.V./I.O. or 0.1 mg/kg E.T. of 1:1,000 Epinephrine Drip may be initiated at this point
- 8. Defibrillate @ 4 joules/kg * 30 60 seconds after each medication
- 9. Lidocaine 1 mg/kg I.V./E.T./I.O.
- 10. Defibrillate @ 4 joules/kg * 30 60 seconds after each medication
- 11. Repeat Epi. q 3-5 mins. I.V./I.O./E.T. 0.1-0.2 mg/kg of 1:1,000 or Epi Drip, Mix 0.6 mg (0.6) in D5W to make a total volume of 100 cc in a Solutrol, prime tubing; then 1 cc/kg/hr = 0.1 mcg/kg/min = 25 cc/hr
- 12. Bretylium 5 mg/kg I.V./I.O. push
- 13. Defibrillate @ 4 joules/kg * 30 60 seconds after each medication
- 14. Consider Sodium Bicarb. 1 mEq/kg I.V./I.O.
- 15. Bretylium 10 mg/kg I.V./I.O. push
- 16. Defibrillate @ 4 joules/kg * 30 60 seconds after each medication
- 17. Initiate transport as soon as possible

C. Treatment - **Protocol**

Contact Medical Control for further instructions.

Notes: *Check for pulse and rhythm after each defibrillation.

Give 0.01 mg/kg of 1:10,000 epinephrine for first dose I.V. / I.O.

Give 0.1 mg/kg of 1:1,000 epinephrine for first dose E.T.

Give 0.1 - 0.2 mg/kg of 1:1,000 epinephrine for all subsequent doses

Epinephrine Drip for pt's 1 - 8 y/o:

Mix 0.6 mg (0.6cc) in D5W to make total volume of 100 cc (Soluset), prime

tubing; then $1 \frac{\text{cc/kg/hr}}{0.1 \text{ mcg/kg/min}} = 25 \frac{\text{cc/hr}}{0.1 \text{ mcg/kg/mi$

PEDIATRIC CARDIAC EMERGENCY

Ventricular Tachycardia

A. Assessment

Confirm cardiac rhythm with quick look paddles or electrodes
Check for palpable pulse (brachial for infants - carotid for adolescents)
If the suspected etiology of the V-Tach is cocaine or crack ingestion or I.V. injection, contact Medical Control immediately.

B. Treatment

10 - 15 minutes.

Pulseless: Treat as Ventricular Fibrillation Protocol.

Pulse Present - Stable
Standing Order
Standing Order
Overson 1000/ (LIV N.S. K.V.O.)

Oxygen 100% / I.V. N.S. K.V.O. Oxygen 100% / I.V. or I.O. N.S. K.V.O. cardiac monitor, initiate transport

Protocol

Protocol Contact Medical Control, consider;
Contact Medical Control, consider: if conscious, Valium 0.2 mg/kg IV/IO
Lidocaine 1 mg/kg, may repeat in

Lidocaine 1 mg/kg

Syn. Cardioversion 0.5-1 joules/kg Syn. Cardioversion 2 joules/kg

Lidocaine 120 mg/100 cc @ 1-2.5 cc/kg/hour upon conversion.
Consider Bretylium 5 mg/kg slowly over 8-10 minutes.

Start I.V. infusion of antiarrhythmic agent that resolved arrhythmia

Unstable indicates **signs** of hypotension, shock, congestive heart failure, ischemia, or infarction; **Symptoms** include chest pain, and dyspnea.

PEDIATRIC ENVIRONMENTAL EMERGENCY

Chemical Exposure

Special Note: Your safety is the highest priority. **Do not** enter or approach any situation which may be harmful to you unless you are outfitted with the appropriate protective clothing and self-contained breathing apparatus and are properly trained to do so.

A. Assessment

History of exposure to chemical Protect yourself from danger of exposure Identify substance and verify with documentation Material Safety Data Sheets (M.S.D.S.) if available Consider Self Contained Breathing Apparatus

B. Treatment - Standing Order

If Internal Exposure and Conscious:

Contact Medical Control

If External Exposure:

Remove victim's clothing Decontaminate

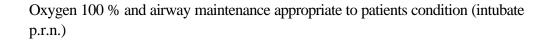
Powder or like substance brush off of patient flush with copious amounts of water for at least 20 minutes transport and continue flushing if necessary and if possible

Liquid substance

flush with copious amounts of water for at least 20 minutes transport and continue flushing if necessary and if possible

If Inhalation:

Consider Self Contained Breathing Apparatus Remove victim from source



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PEDIATRIC ENVIRONMENTAL EMERGENCY

Drug Ingestion

A. Assessment

History of drug ingestion Level of consciousness Identify cardiac rhythm if suspected cardiotoxin, unconscious, or hypotensive

B. Treatment - Standing Order

- 1. Protect yourself from toxin and/or unruly patient
- Oxygen 100% and airway maintenance appropriate to patient's condition, E.K.G., Sugar.

 Monitor
 Check Blood
- 3. I.V. or IO access LR K.V.O.
- 4. Narcan 0.1 mg/kg I.V. or 2 mg titrated to effect **if** patient is bradycardic, hypotensive, comatose and pin-point pupils.
- 5. If actively convulsing, Valium 0.2 mg / kg IV until seizing activity subsides or 10mg max dose.

Note: One of the most lethal and common drug ingestion overdoses is that of Pre-Natal Vitamins. Contact Medical Control and initiate immediate transport.

PEDIATRIC ENVIRONMENTAL EMERGENCY

Hyperthermia

A. Assessment

History of exposure to warm temperature Usually seen with increased exertion Febrile May have hot and dry skin May be hypotensive

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition.
- 2. Remove clothing, cover with wet linen, expose to circulating air, and cool.
- 3. I.V. / I.O. Ringers Lactate K.V.O. and Monitor E.K.G.

C. Treatment - Protocol

Contact Medical Control, consider:

I.V.P. of L.R. 20 cc/kg over 30 mins.

If patient remains tachycardiac or hypotensive, increase I.V. rate to 5 cc/kg/hr

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PEDIATRIC ENVIRONMENTAL EMERGENCY

Hypothermia

A. Assessment

History of exposure to cool temperature Altered level of consciousness Bradycardia Hypotension Core temperature below 90 degrees F

B. Treatment - Standing Order (Handle gently, slightest jolt may trigger V-Fib.)

For All Patients:

- 1. Remove wet garments
- 2. Protect against heat loss and wind chill (use blankets)
- 3. Maintain horizontal position

Examine for associated trauma

- 4. Avoid rough movement and excess activity
- 5. Monitor core temperature and cardiac rhythm

If Unconscious and Pulseless, Evaluate for One Full Minute

- 1. CPR 100 % oxygen at a rate of 60 compressions / 12 ventilations, (Do not perform C.P.R. if bradycardia rhythm exists on monitor)
- 2. Identify cardiac rhythm, go to appropriate treatment protocol if temperature is greater than 85 degrees F.
- 3. I.V./I.O. warmed N.S. @ 10 cc/kg/hr
- 4. Contact Medical Control for further instructions.

Pediatric Environmental Emergency Hypothermia

Continued

Standing Order

If Fibrillating and Core Temperature is Less than 85 degrees F

Defibrillate @ 2 joules/kg only once, then C.P.R. if unsuccessful until temperature greater than 85 F

Intubate

If Fibrillating and Core Temperature is Greater than 85 degrees F

Go to Ventricular Fibrillation Protocol.

If Fibrillation Converts

Lidocaine 1 mg/kg I.V. bolus I.V. Lidocaine 120 mg/100 cc D5W I.V. admix run @ 1-2.5 cc/kg/hr. (titrate) Place patient in warm area Contact Medical Control

If Greater than 30 minute Transport Time

Add heat via warm external objects to head, neck, chest, and groin Do Not Warm Extremities

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PEDIATRIC ENVIRONMENTAL EMERGENCY

Near Drowning

A. Assessment

History compatible with drowning Suspect hypothermia in "cold water" drowning Suspect cervical spine injury

B. Treatment - Standing Order

- 1. Remove from water, clear airway while protecting C-spine
- 2. Clear airway with regard to C-spine using standard techniques for obstructed airway. If gastric distention interferes with ventilation, decompression of stomach may be required.
- 3. Intubate if apneic or unconscious
- 4. Patient should be quickly dried and placed on a dry surface before defibrillating to prevent injury to rescuer performing defibrillation.

If Unconscious and Pulseless

C.P.R. 100 % Oxygen Evaluate cardiac rhythm and go to appropriate treatment protocol Contact Medical Control

If Fibrillating and Body Temperature Normal

Go to Ventricular Fibrillation Protocol.

If Hypothermic

Go to Hypothermia Protocol.

PEDIATRIC ENVIRONMENTAL EMERGENCY

Poisonous Snake Bite

A. Assessment

Protect yourself from danger of exposure of snake bite. Snakes can envenomate up to one hour after death

Determine type of snake (number of puncture marks not diagnostic), time of bite, and changes in signs and symptoms since occurrence.

- B. Treatment Standing Order
- 1. Remove rings and bracelets from victim
- 2. Oxygen and airway maintenance appropriate to patient's condition (intubate p.r.n.)
- 3. I.V./ I.O. N.S. K.V.O. if hypotensive
- 4. Immobilize below level of patient's heart
- 5. Allay (relieve) anxiety and keep patient at rest
- 6. Contact Medical Control

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PEDIATRIC MEDICAL EMERGENCY

Acute Pulmonary Edema

A. Assessment (Any of the following may be present)

Will find in iron overdose secondary to pre-natal vitamin ingestion

Dyspnea / Cyanosis

Diaphoresis

Marked Orthopnea / Erect Posture

Distended Neck Veins

Bilateral Rales / Wheezes

Tachycardia

History of C.H.F.

- B. Treatment Standing Order
- 1. Oxygen at flow rate appropriate to patient's condition
- 2. Evaluate cardiac rhythm and vital signs
- 3. I.V. / I.O. D5W K.V.O.
- 4. Contact Medical Control

PEDIATRIC MEDICAL EMERGENCY

Hyperglycemia

A. Assessment

History of onset

Altered level of consciousness

Pulse: tachycardia, thready pulse

Kussmaul Respirations

Hypotension

Dry mucous membranes

Skin may be cool (consider hypothermia)

Ketone odor on breath

Abdominal pain, nausea and vomiting

History of polyuria, or polydipsia (excessive urination or thirst)

- B. Treatment Standing Order
- 1. Oxygen at flow rate appropriate to patient's condition
- 2. I.V. N.S. K.V.O.
- 3. Check blood sugar
- 4. Contact Medical Control for further direction

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PEDIATRIC MEDICAL EMERGENCY

Hypoglycemia

A. Assessment

History of onset in minutes

History of Insulin excess (overdose, missed meal, exercise, vomiting, or diarrhea)

Confusion, agitation, headaches, or comatose

Pulse Rate (normal to tachycardia)

Respirations (shallow, slow)

Skin (sweaty, often cool)

Flaccid muscle tone

Grand Mal seizures

Fecal, urinary incontinence

Continually monitor vital signs

Cardiac monitor if comatose

B. Treatment - Standing Order

- 1. Oxygen at flow rate appropriate to patient's condition monitor E.K.G.
- 2. Obtain blood sugar
- 3. I.V. / I.O. N.S. K.V.O.
- 4. If blood glucose level is less than 40 mg%: glucose if patient is conscious **or**

Give oral

5. Dextrose D25 @ 1 cc/kg I.V.P. if blood sugar is less than 40 mg% Dilute D50 @ 1:1 with N.S. to yield D25W

C. Treatment - Protocol

Contact Medical Control for further orders or interventions.

PEDIATRIC MEDICAL EMERGENCY

Respiratory Distress (Asthma / Wheezes)

A. Assessment (History of Onset and Medications)

Mild Attack - Slight increase in respiratory rate. Mild wheezes. Good skin color.

Moderate Attack - Marked increase in respiratory rate. Wheezes easily heard.

Severe Attack - Respiratory rate more than twice normal.

Loud wheezes or so tight no wheezes are heard, patient anxious.

Grey or ashen skin color.

B. Treatment - Standing Order

Mild Attack: Oxygen appropriate to patient's condition and transport.

Moderate Attack: Same as below **except**, orders **must** be received for Epinephrine

Severe Attack:

- 1. Oxygen appropriate to patient's condition
- 2. Evaluate Cardiac Rhythm
- 3. If less than 8 years old, contact Medical Control
- 4. If 8 years or older Albuterol Nebulization 2.5 5 mg over 5-15 minutes
- 5. If no response from Albuterol, Epinephrine 1:1000 0.01 mg/kg SQ to 0.3 mg max
- 6. Repeat Epinephrine 1:1,000 0.01 mg/kg SQ to 0.3 mg max per dose in 15 minutes if necessary
- 7. I.V. N.S. K.V.O. / Transport Immediately

Special Note: Monitor all patients closely for cardiac dysrhythmia. **If they develop, stop** the drug and treat dysrhythmia appropriately.

PEDIATRIC MEDICAL EMERGENCY

Respiratory Distress (Stridor)

A. Assessment

Stridor, grunting, or wheezing

Hoarseness

Drooling

Choking

Retractions, nasal flaring

Cyanosis (perioral, mucous membranes, nail beds)

Agitation

Fatigue

Tachypnea

B. <u>Treatment</u> - <u>Standing Order</u> (Avoid hyperextension and allow child to select position of comfort)

Examination: Acyanotic, breath sounds present (stridor, wheezing)

Stridor

Croup: usually less than 3 yrs. old, recent cold

Epiglottitis: usually over 3 yrs old, drooling, fever, tripod position, sudden onset

- 1. Oxygen 100 %, use mask if tolerated
- 2. Attempt to keep child calm and allow child to maintain position of comfort, allow parent to hold mask if this helps child stay calm
- 3. Avoid attempts to suction, finger sweep, or visualize pharynx

<u>Foreign Body</u> (asymmetrical breath sound, positive history)

- 1. Oxygen 100 %, use mask if tolerated
- 2. Basic Life Support with positive Hx of foreign body
- 3. Foreign bodies are the most common cause of airway obstruction in children

Examination: Cyanotic, breath sounds not clear

If apneic or gasping: Oxygen 100 %

If no improvement: Oxygen 100 % with positive pressure ventilation

< 1 yr. @ 40 respirations per minute > 1 yr. @ 30 respirations per minute

PEDIATRIC MEDICAL EMERGENCY

Respiratory Distress (General)

A. Assessment

Stridor, wheezing Grunting, retracting, nasal flaring Cyanosis Rapid shallow respirations Poor peripheral perfusion

B. Treatment - Standing Order

- 1. Oxygen, 100 %, high flow and/or appropriate to patient condition
- 2. Assess and open airway

For stridor, go to Respiratory Distress (Stridor) Protocol.

For Wheezing, go to Respiratory Distress (Asthma/Wheezes) Protocol.

- 3. Assist ventilation with mouth-to-mask or bag-valve-mask ventilation if patient is apneic, makes gasping respirations, or breathing ineffectively
- 4. Check pulse if slow or absent, go to appropriate cardiac protocol
- 5. Intubate if no response or inadequate response to assisted ventilations. No more than three attempts should be made before contacting medical control, monitor pulse.

PEDIATRIC MEDICAL EMERGENCY

Seizures

A. Assessment

Febrile seizures are to be ruled out prior to medication administration

Seizure: onset, duration, type, post-seizure level of orientation Medical: head trauma, diabetes, headaches, drugs, alcohol, seizures

Physical: seizure activity, level of consciousness, incontinence, head and mouth trauma, vital

signs

B. Treatment - Standing Order

- 1. Oxygen 100 % and support airway
- 2. I.V.or IO N.S. K.V.O.

check blood sugar

- 3. Cool patient if febrile
- 4. Dextrose 1 cc/kg I.V. if less than 40 mg/percent

Dilute 1:1 with N.S. to yield D25W

5. If patient is actively seizing, Valium 0.2 mg/kg @ 1 mg/min IV

Rectal Valium may be given if IV access unobtainable:

0.01 mg/kg use distal end of french catheter

6. Contact Medical Control

C. Treatment - Protocol

If seizing persists, contact Medical Control for orders for further Valium

PEDIATRIC SHOCK / TRAUMA

Anaphylactic Shock

A. Assessment

Associated with stings or ingestion of allergen Respiratory signs and symptoms should predominate i.e., dyspnea, bilateral wheezes Urticaria (hives), generalized erythema (flushed) Light-headed, hypotensive, tachycardiac

B. <u>Treatment</u> - **Standing Order**

- $1.\;\;$ Oxygen 100 % and airway maintenance appropriate to patient's condition evaluate cardiac rhythm
- 2. Epinephrine 1:1000 0.01 mg/kg SQ may repeat q 15 minutes, 3 times (max. 0.3 mg per dose)
- 3. Benadryl 1 mg/kg IV or IM
- 4. Primary I.V. N.S. K.V.O. with large bore catheter or IO

C. Treatment - Protocol

Contact Medical Control, consider;

Epinephrine 1:10,000 IV Bolus and/or constant infusion

PEDIATRIC SHOCK / TRAUMA

Cardiogenic Shock

A. Assessment

Frequently associated with sepsis, renal failure, carditis, or cardiomyopathy with tachy or brady dysrhythmia, or blunt chest trauma

Neck vein distention in sitting position (rare in infants)

Moist sounding lungs (rales, rhonchi)

Peripheral edema (if chronic heart failure)

Determine if cardiac dysrhythmia exists

Consider tension pneumothorax

Consider cardiac tamponade

B. Treatment - Standing Order

- 1. Semi-Fowlers or position of comfort
- 2. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 3. Evaluate cardiac rhythm treat dysrhythmia according to appropriate cardiac protocol
- 4. I.V. or IO N.S. K.V.O. with large bore catheter

C. Treatment - **Protocol**

Contact Medical Control, consider:

N.S. 10 cc/kg bolus

Dopamine 6 mg/kg in 100 cc D5W I.V. admix, begin drip @ 6cc/hr (titrate) only after the patient has received adequate hydration

PEDIATRIC SHOCK / TRAUMA

Hypovolemic Shock

A. Assessment

Cool, clammy skin, dry mucous membranes, sunken eyes, sunken fontanelle Poor capillary refill (greater than 5 seconds)

History of fluid loss (fever, vomiting, diarrhea) or hemorrhage (trauma, post-tonsillectomy bleeding)

Tachycardia		Low Systolic Blood Pressure		
Newborn	>180 bpm	Newborn	<60mmHg	
Infants	>160 bpm	Infants	< 70 mmHg	
Toddlers	>140 bpm	Toddlers	< 80 mmHg	
Preschooler	>130 min	Preschooler	< 80 mmHg	
School Age	>120 bpm	Adolescent	<90 mmHg	
Adolescent	>110 bpm			

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. Monitor cardiac rhythm and vital signs
- 3. Primary IO or I.V. N.S. 20 cc/kg bolus

Repeat once if necessary

- 4. Secondary I.V. L.R. (large bore)
- 5. Maintain temp. above 97 F, warm I.V. fluid
- 6. If sugar level becomes less than 40 mg/percent, use Pediatric Hypoglycemia protocol.

C. Treatment - Protocol

Contact Medical Control for further orders

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PEDIATRIC SHOCK / TRAUMA

Neurogenic Shock

A. Assessment

Associated with spinal cord injuries and overdoses Signs of hypovolemic shock without peripheral vasoconstriction (warm shock)

B. Treatment - Standing Order

- 1. Secure spine and airway
- 2. Oxygen 100 % and control A.B.C.'s
- 3. Establish IO or I.V. N.S. 10 cc/kg
- 4. Consider occult bleeding and treat as Hypovolemic Protocol.
- 5. Re-bolus with 10 cc/kg N.S. I.V.

C. Treatment - **Protocol**

Contact Medical Control, consider:

Dopamine 6 mg/kg in 100 cc D5W I.V. admix, begin @ 6 cc/hr (titrate) only after 500 cc's or more have been given IV

PEDIATRIC SHOCK / TRAUMA

Septic Shock

A. Assessment

Cool, clammy skin Poor capillary refill Tachycardia / Hypotension Potential for underlying infection

<u>Tachycardia</u>		Low Systo	Low Systolic Blood Pressure		
Newborn	>180 min	Newborn	<60 mmHg		
Infants	>160 min	Infants	<70 mmHg		
Toddlers	>140 min	Toddlers	<80 mmHg		
Preschooler	>130 min	Preschooler	<80 mmHg		
School Age	>120 min	Adolescent	<90 mmHg		
Adolescent	>110 min				

B. Treatment - Standing Order

- 1. Oxygen 100 % and airway maintenance appropriate to patient's condition
- 2. I.V. or IO N.S. 20 cc/kg bolus

repeat once if necesary

- 3. Obtain blood glucose level
- 4. Maintain temp. above 97 F
- 5. If sugar level becomes less than 40 mg/percent, use Pediatric Hypoglycemia protocol.

C. Treatment - Protocol

Contact Medical Control

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PEDIATRIC SHOCK / TRAUMA

Thermal Burn

A. Assessment

Look for burns of the nares, oropharyngeal mucosa, face or neck, carbonaceous sputum, dyspnea

Listen for abnormal breath sounds

Note if burn occurred in closed space

Determine extent of injury (including associated injuries)

Remove clothing from affected parts

Cardiac monitor all major burn patients

Do Not Use Ice Under Any Circumstances!

B. Treatment - Standing Order

1. Stop the burn process and provide Oxygen 100 % and airway maintenance appropriate to patient's condition.

Be prepared to intubate. Edema will cause patients' airway to close almost instantly and without significant signs.

Monitor all vital signs and continue reassessment including, but not limited to, respiratory rate, peripheral pulses and circulation, level of consciousness, and EKG rhythm and rate.

- 2. Remove rings and any other jewelry even if extremities are not affected
- 3. Cover burned area with a dry sterile dressing or burn sheet.

DO NOT use Burn Jel or any other commercially manufactured burn products.

4. I.V. or IO L.R. @ 10 cc/kg/hr

If Rule of 9's BSA% can not be readily obtained administer IV fluids using the following guide:

150 ml per hour for patients under 5 years old

250 ml per hour for patients 5 - 15 years old

500 ml per hour for patients over 15 years old

C. Treatment - Protocol

Contact Medical Control before administering any pain medication.

PEDIATRIC SHOCK / TRAUMA

Trauma Treatment Priorities - Standing Order

1. Evaluate and consider Mechanism of Injury in treatment scheme.

Secure airway/breathing with regard to C-spine.

For children and infants, the external ear canal should be aligned with the shoulder to keep the c-spine in the neutral position.

- 2. Assess and treat A.B.C.'s
- 3. Oxygen 100 % and airway maintenance appropriate to patient's condition hyperventilate if necessary
- 4. Initiate Transport
- 5. I.V. and or I.O. L.R. x 2 large bore rate commensurate (proportional) to blood loss or vital signs, warm fluid
- 6. Protect against heat loss
- 7. Monitor vital signs and neuro status

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PEDIATRIC SHOCK / TRAUMA

Intraosseous Infusion

A. Indications - Assessment:

- 1. Patient is less than 6 years old.
- 2. Patient is in need of fluid or drug administration.
- 3. Inability to establish IV access with three attempts or in 90 seconds and there is a critical need for IV access
- 4. Patient is in dire need of therapy, ie; cardiac arrest, hypovolemia, hypoglycemia, seizures

B. Contraindications:

- 1. Placement in a fractured bone.
- 2. Placement distal to a fracture.
- 3. Infections or burns at the intended site are relative contraindications and Medical Control shall be contacted for advisement.

C. Treatment - Standing Order.

ANY child who meets the above list of indications may receive one or more IO lines at the Fire Fighter Paramedic's discretion.

D. Procedure:

- I. Identify the landmarks with the choice site being the proximal tibia
 - A. Proximal tibia 1 2 finger breadths (1-3 cm) distal to tibial tuberosity on the anteromedian surface
 - B. Distal Femur 1 2 finger breadths (1-3 cm) proximal to the lateral condyles

2. Prep site with Betadine

- 3. Direct and insert the needle with the stylet in place perpendicular to the bone or angled away from the joint, avoiding the epiphyseal plate. Insert with pressure and a boring or screwing motion until penetration into the marrow space, which is marked by a sudden lack of resistance.
- 4. Remove the stylet

PEDIATRIC SHOCK / TRAUMA

Intraosseous Standing Order - continued

- 5. Test for appropriate placement by noting at least one of the following:
 - Aspiration with syringe yields bloody fluid
 - B. Infusion of fluid with a syringe does not meet resistance and does not infiltrate
 - C. Needle stands without support
 - D. A "pop" or "give' is sensed during placement
- 6. Attach stopcock to the needle and IV tubing to the stopcock.

Flow rates to gravity may be unacceptably slow.

Fluids are to be "pushed" with a syringe attached to the stopcock

- 7. Stabilize the needle on both sides with sterile gauze and secure with tape, avoiding tension on the needle
- 8. Observe for calf swelling which is indicative of infiltration
- E. Compatible Fluids and Medications:
- 1. Normal Saline or Lactated Ringers IV solutions. Fluid of choice is Normal Saline.
- 2. Atropine, Sodium Bicarbonate (diluted), Diazepam (Valium), Dopamine, Epinephrine, Dextrose (no D50 - administer D25), and Steroids

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PEDIATRIC SHOCK / TRAUMA

Pediatric Points to Remember

- 1. An infant is a child less than one year old.
- 2. A child is from one to eight years old.
- 3. Remember in an arrest situation, you may use the Braslow Pediatric Tape on the Emergency Unit or on your Company. This will provide a good approximation of the proper size equipment and drug doses.
- 4. Remember that few pediatric arrests are primary cardiac events. Most stem from respiratory/airway problems, dehydration/metabolic, or hypothermia. Ensure that a child that arrests or is pending arrest is well oxygenated, well hydrated and warm. Prognosis is extremely poor for a child that arrests.
- 5. Treat children aggressively before they arrest.
- 6. Remember that with children the IO drug route is quick to establish and may be easier than gaining IV access.
- 7. Never administer Verapamil to a pediatric patient.
- 8. When administering medications through the endotracheal tube:
 - the medication should be diluted with normal saline to a volume of 3 5 mL and instilled into the endotracheal tube.
 - alternatively, the medication may be delivered beyond the tip of the endotracheal tube by instillation through a suction catheter followed by a 3 - 5 mL flush of normal saline.
 - following endotracheal medication administration, several positive-pressure breaths (hyperventilation with BVM) must be provided.
 - medications administered via IV should be followed by at least 5 mL NS bolus and extremity elevated.
- 9. When in doubt contact Medical Control

PEDIATRIC SHOCK / TRAUMA

Trauma Assessment - Standing Order

- 1. Perform patient triage with emphasis on ABC's and spinal immobilization, control of bleeding, level of consciousness and vital signs.
- 2. Determine and consider mechanism of injury and estimate force involved.
- 3. Gather history including medications and underlying medical problems.
- 4. High flow, 100 % oxygen concentration and intubate prn.
- 5. Obtain EKG and blood glucose level
- 6. Transport: Scene time should be limited to 10 12 minutes.
- 7. Start two large bore IV's or IO's enroute. Fluid of choice is Lactated Ringers. Do not stay on the scene initiating IV's unless patient is pinned in vehicle, or prolonged scene time is unavoidable.
- 8. Notify the receiving hospital of patient condition ASAP. Scene flight criteria is same as that of the adult.
- 9. Avoid narcotic administration.
- 10. ABC management and reassessment, including suction PRN.

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PEDIATRIC SHOCK / TRAUMA

Pediatric Trauma Score

(13 yrs. of age & under)

Component	+ 2 points	+ 1 point	- 1 point
Size	Greater than 20 kg	10-20 Kg	Less than 10 kg
Airway	Normal	Oral/Nasal Airway	Unmaintainable/Intubated
Systolic B/P	Greater than 90 mm Hg	50-90 mm Hg	Less than 50 mm Hg
C.N.S	Awake	Obtunded/LOC	Coma
Open Wound	None	Minor	Major/Penetrating
Skeletal	None	Closed Fractures	Open/Multiple Fractures

Total Point Values From	Physical Presentation Or Injury
Trauma Score	Sum In Points

PEDIATRIC SHOCK / TRAUMA

<u>Triage Decision Scheme</u> (13 yrs. of age & under)

Pediatric Trauma Score of 8 or less: Refer to Destination Guidelines see Pediatric Shock / Trauma Protocol.

YES	NO
Transport to Level I Pediatric Trauma Center	Assess anatomy of injury
Advise Medical Control	
Penetrating injury proximal to elbow, and knee, including	
head and neck	
Flail chest	
Traumatic Respiratory Arrest	
Pelvic fracture with shock	
Amputation proximal to wrist & ankle	
Combination trauma with burns of 15% BSA, or to the face	
or airway	
2 or more proximal long bone fractures	
Limb paralysis	

YES	NO
Contact Medical Control for consideration of transfer to Level I	Assess anatomy of injury
or II Pediatric Trauma Center. If Medical Control is	
unavailable, then transport to highest level Trauma Center	
Evidence of High Impact	Re-evaluate with Medical
	Control
Ejection from automobile	
Death of vehicle occupant (particular if unrestrained)	
Fall greater than 20 feet	
Velocity change greater than 20 mph	
Passenger intrusion greater than 12 inches	
Pedestrian impact (significant) 5-20 + MPH	
Motorcycle accident greater than 20 MPH or with separation	
of rider and bike	
Bicycle accident with significant impact	

YES	NO
Contact Medical Control for consideration of transfer to Level I	
or II Pediatric Trauma Center. If Medical Control is	

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unavailable, then transport to highest level Trauma Center	

PEDIATRIC GENERAL INFORMATION

Age	Weight	Normal	Normal	Heart Rate	Respiratory Rate
	(kg)	Diastolic BP	Systolic BP	Per Minute	Per Minute
Birth	3.5	56 - 70	66 - 90	110 - 160	30 - 60
6 mos	7.0	56 - 70	70 - 104	100 - 140	30 - 50
1 yr	10.0	56 - 76	80 - 104	100 - 140	24 - 34
2 yr(s)	13.0	56 - 76	80 - 104	90 - 110	20 - 30
3 yr(s)	15.0	56 - 76	80 - 104	90 - 110	20 - 30
4 yr(s)	17.0	56 - 76	90 - 110	80 - 110	20 - 30
5 yr(s)	19.0	56 - 76	90 - 110	80 - 110	20 - 30
6 yr(s)	23.00	56 - 76	90 - 110	70 - 100	16 - 30
7 yr(s)	25.0	56 - 76	90 - 110	70 - 100	16 - 30
8 yr(s)	28.0	60 - 76	90 - 110	70 - 100	16 - 30
9-10yr(s)	30.0	64 - 76	90 - 114	70 - 90	10 - 20
11-12yr(s)	37.0	64 - 80	90 - 120	70 - 90	10 - 20
13-15yr(s)	50.0	64 - 80	110 - 124	60 - 80	10 - 20
16-18yr(s)	65.0	64 - 90	110 - 134	60 - 80	10 - 20

Size ETT = $\underline{16 + (age in years)}$

4

PEDIATRIC GENERAL INFORMATION

Age- and Weight - Related Pediatric Equipment Guidelines

	Premature	Newborn	6 Months	1 - 2	5 Years	8 - 10 Years
	3 kg	3.5 kg	7 kg	Years	16 - 18 kg	24 - 30 kg
				10 - 12 kg		
C-collars			Small	Small	Small	Medium
O2 Masks	Premature or Newborn	Newborn	Pediatric	Pediatric	Pediatric	Adult
BVM	Infant	Infant	Pediatric	Pediatric	Pediatric	Pediatric or Adult
Laryngosc opes	0	1	1	1	2	2 - 3
ET Tubes	2.5 - 3.0	3.0 - 3.5	3.5 - 4.5	4.0 - 4.5	5.0 - 5.5	5.5 - 6.5
Suction	6 - 8 Fr	8 Fr	8 - 10 Fr	10 Fr	14 Fr	14 Fr
Catheters						
Oral	Infant	Infant or	Small	Small	Medium	Medium or
Airways		Small				Large
IV	22 - 24	22 - 24	22 - 24	20 -22	20 - 2	20 - 22 angio
Equipment	angio	angio	angio	angio	angio	
BP Cuffs	Newborn	Newborn	Infant or	Child	Child	Child or
			Child			Adult

PEDIATRIC GENERAL INFORMATION

<u>Emergency Pediatric Drug Dose Guide</u> - Refer to Treatment Modalities for Protocols and Standing Orders or the Broselow Tape

Resuscitation

Oxygen 100%

Fluid Bolus 20 ml/kg NS IVP

Defibrillation V-Fib - 2 joules/kg (if unsuccessful, double voltage and

repeat)

Cardioversion V-Tach/SVT - 0.5 joules/kg (if unsuccessful, double voltage

and repeat)

Atropine 0.02 mg/kg IV/IM/ET (minimum 0.1 mg) (max: 0.5 mg

child/1.0 mg adolescent) may repeat x 1

Bicarbonate 0.5 - 1.0 mEg/kg IV (repeat prn)

Calcium Chloride (10%) 10 - 25 mg/kg elemental Ca IV slow push = 0.2 - 0.3

ml/kg CaCl

Epinephrine Bradycardia: 0.01 mg/kg (1:10,000) IV/IO; 0.1 mg/kg

(1:1,000) ET, repeat PRN

Asystole: 0.01 mg/kg (1:10,000) IV/IO; 0.1 mg/kg (1:1,000) ET; 2nd dose: 0.1 - 0.2 mg/kg (1:1,000) IV/IO/ET repeat q

3 - 5 min.

Bretylium 1st dose: 5 mg/kg; 2nd dose: 10 mg/kg: rapid IV

Glucose 0.5 - 1.0 gm/kg = 2 - 4 ml/kg D25W IV push (use D10W for

Neonates)

Lidocaine 1 - 2 mg/kg IV bolus, then 20 - 50 mcg/kg/min drip

Naloxone (Narcan) 0.1 mg/kg IM/IV/ET (minimum 0.5 mg) max: 2.0 mg) also

sublingually

Cardiovascular

Pressors Dopamine 2 - 5 mcg/kg/min (renal effect):

5 - 20 mcg/kg/min (cardiac effect)

Epinephrine 0.1 mcg/kg/min IV (titrate to effect)

Isoproterenol (Isuprel) 0.1 mcg/kg/min IV (titrate to effect)

(keep HR < 200 BPM)

Adenosine 0.1 - 0.2 mg/kg rapid IV bolus max single dose 12 mg

Anaphylaxis

Benadryl 1 - 2 mg/kg PO/IV/IM (max 50 mg)

Epinephrine 0.01 ml/kg (1:1,000) SC (repeat q 5 minutes prn)

maximum single dose is 0.3 cc

PEDIATRIC GENERAL INFORMATION

Emergency Pediatric Drug Dose Guide - continued

Anticonvulsant

Diazepam (Valium) 0.2 - 0.5 mg/kg IV slow (max: 5 mg < 5 yrs/ 10 mg > 5 yrs)

Rectal: 0.5 mg/kg

Respiratory

Albuterol 0.5 ml in 2.5 ml NS via nebulizer; may repeat x 3 prn

Epinephrine 0.01 ml/kg (1:1000) SC (max: 0.5 ml) may repeat q 15 min)

Diuretics

Furosemide (Lasix) 1.0 mg/kg IM/IV

Analgesics/Narcotics

Acetaminophen 15 - 20 mg/kg PO q 4 hours Ibuprofen 5 - 10 mg/kg PO q 6 - 8 hours

Morphine 0.05 - 0.1 mg/kg IM/IV/SC q 2 - 4 hours

MEDICATIONS FOR STANDARD FIRE FIGHTER PARAMEDIC DRUG BOXES

Adenosine (Adenocard)

Albuterol - Nebulizer

Atropine

Benadryl (Diphenhydramine) Bretylol (Bretylium Tosylate)

Calcium Chloride 10%

Cardene I.V.

Dextrose (D50)
Dopamine (Intropin)

Epinephrine 1:1,000 (Adrenaline) Epinephrine 1:10,000 (Adrenaline)

Isuprel (Isoproterenol)

Lasix (Furosemide)

Lidocaine 100 mg (Xylocaine) Lidocaine 2 gm (Xylocaine)

Morphine Sulfate

Narcan (Naloxone) Nitrostat spray (Nitroglycerin)

Phenergan (Promethazine) Procainamide (Pronestyl)

Sodium Bicarbonate

Stadol (Butorphanol)

Valium (Diazepam) Verapamil (Isoptin)

Note: Medications other than those listed above may be carried on Memphis Division of Fire Service Advanced Life Support equipment ONLY with the expressed written consent and proof of competency in use by the Division's Medical Director or his designee.

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DRUG INFUSION ADMIX DOSAGE GUIDELINES

<u>Lidocaine</u> - <u>Procainamide</u>

```
2 gram medication / 500 ml D5W = 4 mg/ml (always use 60 gtt. set)

1 mg / min = 15 gtt / min

2 mg / min = 30 gtt / min

3 mg / min = 45 gtt / min

4 mg / min = 60 gtt / min
```

Isoproterenol

```
2 mg medication / 500 ml D5W = 4 ug/ml (always use 60 gtt. set)
2 ug / min = 30 gtt / min
5 ug / min = 75 gtt / min
10 ug / min = 150 gtt / min
20 ug / min = 300 gtt / min
```

Bretylium - Maintenance Drip

```
400 \text{ mg} / 100 \text{ cc's NS in a Solutrol} = 4 \text{ mg/cc}
30 \text{ cc / hr} = 2 \text{ mg / min}
```

Bretylium - Treatment of Ventricular Tachycardia

```
5 mg / kg / 50 cc's NS in a Solutrol = variable dilution factor infuse over 8 - 10 minutes approximately 300 cc / hr
```

Continued:

DRUG INFUSION ADMIX DOSAGE GUIDELINES - continued

Epinephrine Drip in Adult Cardiac Arrest

60 cc's Epi 1:1000 / 90 cc's NS in a Solutrol = 0.04 mg/ml

Use as either piggy back or secondary IV line

Titrate to effect

To achieve 1 mg q 3 min - run @ 50 gtt/min

For 1 mg q 4 min - run @ 40 gtt/min

For 1 mg q 5 min - run @ 30 gtt/min

Epinephrine Drip Guidelines in the adult Cardiac Arrest

Pt is Asystolic, PEA, V-Fib or Pulseless V-Tach

Pt has been successfully intubated

Pt has received 1 round of cardiac drugs according to the appropriate algorhythm

Paramedic has made decision to transport pt. to the hospital and continue resuscitation efforts

Contraindicated with the Epi Mega Dose

Cardene IV

<u>Remember</u> - You only have a Standing Order for the admixture and administration dosages as listed below. You must contact Medical Control for authorization BEFORE administering Cardene IV.

12.5 mg (5ml) of Cardene IV into 125 ml Normal Saline using a Solutrol as either a piggy back to initial IV or as a Secondary IV. Always use a 60 gtt/set. Run IV at 50 ml/hr (5.0 mg/hr) = 50 gtt/min

- a. After 15 minutes @ 50 gtt/min, , if patient's diastolic blood pressure is still 140 or greater and the patient is symptomatic (unstable), increase Cardene IV rate to 75 ml/hr (7.5 mg/hr) which equals 75 gtt/min. Re-evaluate patient's diastolic blood pressure every 3 5 minutes. If pt's diastolic BP drops below 140 and patient's overall condition improves, decrease the infusion rate to 30 ml/hr (3 mg/hr) = 30 gtt/min.
- b. After 15 minutes, if pt's diastolic blood pressure is less than 140 and patient's overall condition has improved, decrease the infusion rate to 30 ml/hr (3 mg/hr) which = 30 gtt/min.

Continued:

DRUG INFUSION ADMIX DOSAGE GUIDELINES - continued

Dopamine

```
400 \text{ mg} / 500 \text{ D5W} = 800 \text{ ug/ml} \text{ (always use 60 gtt/set)}
```

50 kg patient = 110 lbs

2 ug/kg/min = 8 gtt/min

5 ug/kg/min = 19 gtt/min

10 ug/kg/min = 38 gtt/min

20 ug/kg/min = 75 gtt/min

75 kg patient = 165 lbs

2 ug/kg/min = 11 gtt/min

5 ug/kg/min = 28 gtt/min

10 ug/kg/min = 56 gtt/min

20 ug/kg/min = 113 gtt/min

100 kg patient = 220 lbs

2 ug/kg/min = 15 gtt/min

5 ug/kg/min = 38 gtt/min

10 ug/kg/min = 75 gtt/min

20 ug/kg/min = 150 gtt/min

Epinephrine Drip in Pediatric Patient 1 - 8 y/o Cardiac Arrest

Mix 0.6 mg (0.6 cc) of Epi 1:1,000 (1mg/ml) in a Solutrol in D5W to make a total volume of 100 cc, prime tubing; then run at 1 cc/kg/hr = 0.1 mcg/kg/min = 25 cc/hr

AUTHORIZATION FOR STANDING ORDERS

The Memphis Division of Fire Service Emergency Medical Services (MFD-EMS) Standing Orders and Protocols (revision project completed March 1997) are hereby adopted as "Standing Orders" as designated and appropriate to patient's condition to be initiated by MFD-EMS Fire Fighter Paramedics and within their scope of training and licensure whenever a patient presents with injury or illness covered by the orders. At the point in the protocols where it is indicated to contact Medical Control or "Treatment - Protocol", the employee must receive voice orders from Medical Control before proceeding with the protocol. Other orders may be obtained from Medical Control when the situation is not covered by the protocols or as becomes necessary as deemed by the fire fighter paramedic.

Addenda to the effective date of August 18, 1997 Standing Orders and Protocols signed by the Division Medical Director supersede this order.

"Signature on File"		
Kevin S. Merigian, M.D.	Date	
Medical Director		
Memphis Division of Fire Services		

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This Section Reserved For

Fire Prevention

Bureau

Standard Operating Procedures

DIVISION OF FIRE SERVICES APPARATUS MAINTENANCE STANDARD OPERATING PROCEDURES

PREVENTIVE MAINTENANCE FOR AUTOMOBILES

In an effort to upgrade our preventive maintenance on cars and other equipment within the Fire Division, the following maintenance procedures will take effect immediately.

- 1. All automobiles will be monitored by the operator/driver as to the needs for preventive maintenance (oil change).
- 2. Maintenance on automobiles will be performed at 3,000 mile intervals at a location designated by Apparatus Maintenance. Contact Apparatus Maintenance when the preventive maintenance is due. The operator of the assigned automobile will make sure the invoice is forwarded to Apparatus Maintenance. If there are any discrepancies noted by personnel at the facility conducting the maintenance, Fire Apparatus Maintenance should be notified as soon as possible, and discrepancies should also be noted on the invoice. If the discrepancies compromise the safety of the vehicle, contact Apparatus Maintenance before driving the vehicle.
- 3. At 9,000 mile intervals, operators of automobiles should schedule the vehicle for a preventive maintenance at Apparatus Maintenance. The vehicle will be checked thoroughly and any repairs will be done at that time.
- 4. Anytime that a repair needs to be made or a vehicle needs to be checked, do not hesitate to call Apparatus Maintenance or take the vehicle to Apparatus Maintenance.
- 5. Contact Apparatus Maintenance for available facilities to conduct preventive maintenance on vehicles.

Training Bureau personnel will randomly test fire fighting companies on the Minimum Company Standards as outlined in the accompanying text. Company officers have the responsibility for training their personnel to insure that all evolutions (relative to their company) are performed as described. Since all evolutions are timed events, the pace of performance should reflect the pace at which personnel perform their duties on the fireground. These times will be documented and compiled into a monthly report that will provide a ranking of companies according to their performance.

The Following Is A List Of Guidelines That Apply To All Evolutions.

- 1. Each evolution has an accompanying checklist (either on back or attached to). This checklist is the criteria that will be used to evaluate the performance. Each numbered item on the checklist must be properly performed.
- 2. Any checklist item that is omitted, or not properly performed, will be marked wrong. This will result in a one minute penalty being added to the overall time. (example: on all hose lays, engine drivers must pump proper pressures)
- 3. If more than one step is involved within a checklist item, then all steps within the item must be properly performed. If one step is missed, then the entire item will be marked wrong. This will result in a one minute penalty being added to the overall time. (example: raise ladder to a vertical position, pivot the deep side out (if needed) and lower to the building.
- 4. Major safety violations will result in a failure, regardless of time achieved. (example: attack personnel not in proper protective clothing, including SCBA) All failures will be documented and companies involved must be scheduled for a retest.

Minimum Company Standards	All Personnel Evolution #1
	Donning Self Contained
Department Time Standard:	Breathing Apparatus

PROCEDURE: This evolution requires personnel to properly don the SCBA and place it in full operation. The basic fundamentals of checking the SCBA prior to donning are essential. For time standard purposes, each fire fighter on the company will be timed individually; the company's official time will be the average of these individual times. All attack personnel must be in proper protective clothing.

- 1. Stage personnel on the apparatus in their normal riding position. When personnel are ready, give signal to proceed to the air mask compartment.
- 2. Begin Timing When Personnel Opens The Air Mask Compartment.
- 3. Steps of Operation:
 - a. At the air mask compartment, check cylinder air gauge for sufficient amount of air in cylinder.
 - b. Completely remove SCBA from retainer and don. Secure and adjust the shoulder and waist straps.
 - c. Remove and don facepiece. Secure and adjust neck, temple, and forehead straps and check for proper seal.
 - d. Connect inhalation tube to the regulator and open cylinder valve.
 - e. Check to insure SCBA is working properly.
 - f. Don protective hood and helmet with chin strap properly secured.
 - g. Don gloves immediately after helmet is in place.

NOTE: Fire fighter must signal the evaluator when donning procedures are complete.

4. Stop Timing The Evolution When The Fire Fighter Gives The Signal That one Has Completed Donning Procedures.

Checklist For All Personnel Evolution #1 Donning Self Contained Breathing Apparatus

1.	Personnel In Proper Protective Clothing.		
2.	Check Cylinder Air Gauge For Sufficient Amount Of Air.		
3.	Remove The SCBA From The Retainer And Don Using The Overhead Or Vest Method.		
4.	Secure And Adjust The Shoulder And Waist Straps.		
5.	Remove And Don Facepiece.		
6.	Secure And Adjust Neck, Temple And Forehead Straps.		
7.	Check Facepiece For Proper Seal.		
8.	Connect Inhalation Tube To Regulator And Open Cylinder Valve. (Valve Must Be Completely Opened)		
9.	Check To Insure SCBA Is Working Properly.		
10.	Don Protective Hood.		
11.	Replace Helmet And Secure Chin Strap.		
12.	Don Fire Fighting Gloves.		
COMMENTS:			

Minimum Company Standards

All Personnel Evolution #2
24 Foot Ladder Raise
Department Time Standard:

Utilizing 2 Fire Fighters

PROCEDURE: This evolution requires two fire fighters to properly carry and raise a 24 foot extension ladder to a specific location. All attack personnel must be in proper protective clothing, including SCBA.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage personnel and a properly grounded 24 foot extension ladder 75 feet from the site of the ladder raise. When the two fire fighters are ready, give the signal to proceed.
- 2. Begin Timing When The Signal Is Given To Proceed.
- 3. Steps of operation:
 - a. From the staging area, the two fire fighters will properly carry a 24 foot extension ladder 75 feet to the designated site and raise the ladder.
 - b. The fire fighters will fully extend the fly section, lower ladder to building, and set the butt of the ladder.
 - c. Fire fighter #1 will proceed up the ladder, take a leg lock, and simulate the "tie in" at the tip by tying the top rung of the ladder to the next lower rung. Fire fighter #2 will properly butt the ladder until #1 is on the fly section; then, #2 will proceed up the ladder, take a leg lock, and tie the bed and fly sections together.

NOTE: Fire fighters must signal the evaluator when their knot is complete.

4. Stop Timing The Evolution When The Last Fire Fighter Gives The Signal That One's Knot Is Complete.

NOTE: All ladders must be butted when a fire fighter is on the ladder during raising procedures.

Checklist For All Personnel Evolution #2 24 Foot Ladder Raise Utilizing Two Fire Fighters

1.	Attack Personnel In Proper Protective Clothing, Including SCBA.	
2.	Ladder Properly Carried. (Low-Shoulder, Hip, Arm's Length).	
3.	Parallel Raise: Ladder Carried With Fire Fighters On The Outside Of The Ladder In Relationship To The Building.	
4.	Butt-Man Calculates Correct Distance, Then Spots And Secures Butt For The Raise.	
5.	Tip-Man Raises Ladder, Hand Over Hand Motion, To A Vertical Position.	
6.	Both Fire Fighters Butt Ladder Properly. (On The Same Beam).	
7.	Ladder Properly Pivoted If Needed. (Fly Side Away From The Building)	
8.	Fly Section Fully Extended (Hand Over Hand Motion), Ladder Properly Dogged, And Lowered To Building.	
9.	Check Butt For Proper Distance From The Building.	
10.	Ladder Properly Butted When Fire Fighter Is On Ladder.	
11.	Ladder Tied Off Correctly At The Tip; Clove Hitch With A Safety, Center Of The Rungs. (Must Take A Leg Lock).	
12.	Bed And Fly Sections Tied Together Correctly; Clove Hitch With A Safety, Center Of The Rungs. (Must Take A Leg Lock)	
Co	mments:	

Minimum Company Standards

Truck Evolution #1

16 Foot Straight Ladder Raise

Department Time Standard: ______

Utilizing One Fire Fighter

PROCEDURE: This evolution requires one fire fighter to properly carry and raise a 16 foot straight ladder to a specific location. All attack personnel must be in proper protective clothing, including SCBA.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage personnel and a properly grounded 16 foot straight ladder 75 feet from the site of the ladder raise. When the fire fighter is ready, give the signal to proceed.
- 2. Begin Timing When The Signal Is Given To Proceed.
- 3. Steps of operation:
 - a. From the staging area, the fire fighter will properly carry a 16 foot straight ladder 75 feet to the designated site and raise the ladder.
 - b. The fire fighter will properly set the butt, climb the ladder, take a leg lock, and simulate the "tie in" at the tip by tying the top rung of the ladder to the next lower rung.

NOTE: Fire fighter must signal the evaluator when his/her knot is complete.

4. Stop Timing The Evolution When The Fire Fighter Gives The Signal That One's Knot Is Complete.

NOTE: All ladders must be butted when a fire fighter is on the ladder during raising procedures.

Checklist For Truck Evolution #1 16 Foot Straight Ladder Raise Utilizing One Fire Fighter

1.	Att	tack Personnel In Proper Protective Clothing, Including SCBA.			
2.	Ladder Properly Carried. (Low-Shoulder Or High-Shoulder)				
3.	3. Low-Shoulder:				
		Butt Secured Against Building For The Raise. Raise Ladder, Hand Over Hand Motion, Center Of The Rungs, To A Vertical Position Against The Building. Ladder Positioned Deep Side Out Set Butt Proper Distance From The Building.			
Hi	gh-S	Shoulder:			
4.	Lac	Butt Spotted Correct Distance From The Building For The Raise. Raise Ladder To A Vertical Position, Pivot The Deep Side Out (If Needed), And Lower To The Building. Check Butt For Proper Distance From The Building. dder Tied Off Correctly At The Tip; Clove Hitch With A Safety, Inter Of The Rungs. (Must Take A Leg Lock).			
Co	mm	ents:			

Minimum Company Standards

Truck Evolution #2
35 Foot Ladder Raise
Department Time Standard:
Utilizing Two Fire Fighters

PROCEDURE: This evolution requires two fire fighters to properly carry and raise a 35 foot extension ladder to a specific location. All attack personnel must be in proper protective clothing, including SCBA.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage personnel and a properly grounded 35 foot extension ladder 75 feet from the site of the ladder raise. When the two fire fighters are ready, give the signal to proceed.
- 2. Begin Timing When The Signal Is Given To Proceed.
- 3. Steps of operation:
 - a. From the staging area, the two fire fighters will properly carry a 35 foot extension ladder 75 feet to the designated site and raise the ladder.
 - b. The fire fighters will fully extend the fly section, lower ladder to building, and set the butt of the ladder.
 - c. Fire fighter #1 will proceed up the ladder, take a leg lock, and simulate the "tie in" at the tip by tying the top rung of the ladder to the next lower rung. Fire fighter #2 will properly butt the ladder until #1 is on the fly section; then, #2 will proceed up the ladder, take a leg lock, and tie the bed and fly sections together.

NOTE: Fire fighters must signal the evaluator when their knot is complete.

4. Stop Timing The Evolution When The Last Fire Fighter Gives The Signal That One's Knot Is Complete.

NOTE: All ladders must be butted when a fire fighter is on the ladder during raising procedures.

Checklist For Truck Evolution #2 35 Foot Ladder Raise Utilizing Two Fire Fighters

1.	Attack Personnel In Proper Protective Clothing, Including SCBA.	
2.	Ladder Properly Carried. (Low-Shoulder, Hip, Arm's Length).	
3.	Parallel Raise: Ladder Carried With Fire Fighters On The Outside Of The Ladder In Relationship To The Building.	
4.	Butt-Man Calculates Correct Distance, Then Spots And Secures Butt For The Raise.	
5.	Tip-Man Raises Ladder, Hand Over Hand Motion, To A Vertical Position.	
6.	Both Fire Fighters Butt Ladder Properly. (On The Same Beam).	
7.	Ladder Properly Pivoted If Needed. (Fly Side Away From The Building.	
8.	Fly Section Fully Extended (Hand Over Hand Motion), Ladder Properly Dogged, And Lowered To The Building.	
9.	Check Butt For Proper Distance From The Building.	
10.	Ladder Properly Butted When Fire Fighter Is On Ladder.	
11.	Ladder Tied Off Correctly At The Tip; Clove Hitch With A Safety, Center Of The Rungs. (Must Take A Leg Lock).	
12.	Bed And Fly Sections Tied Together Correctly; Clove Hitch With A Safety, Center Of The Rungs. (Must Take A Leg Lock).	
Co:	mments:	

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Minimum Company Standards
Truck Evolution #3
35 Foot Ladder Raise
Department Time Standard:
Utilizing Four Fire Fighters

PROCEDURE: This evolution requires four fire fighters to properly carry and raise a 35 foot extension ladder to a specific location. All attack personnel must be in proper protective clothing, including SCBA.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage personnel and a properly grounded 35 foot extension ladder 75 feet from the site of the ladder raise. When the four fire fighters are ready, give the signal to proceed.
- 2. Begin Timing When The Signal Is Given To Proceed.
- 3. Steps of operation:
 - a. From the staging area, the four fire fighters will properly carry a 35 foot extension ladder 75 feet to the designated site and raise the ladder.
 - b. The fire fighters will fully extend the fly section, lower ladder to building, and set the butt of the ladder.
 - c. Fire fighters #1 will proceed up the ladder, take a leg lock, and simulate the "tie in" at the tip by tying the top rung of the ladder to the next lower rung. Fire fighter #2 will wait until #1 is on the fly section; then, #2 will proceed up the ladder, take a leg lock, and tie the bed and fly sections together.
 - d. Fire fighters #3 and #4 will butt the ladder in the proper manner.

NOTE: Fire fighters must signal the evaluator when their knot is complete.

4. Stop Timing The Evolution When The Last Fire Fighter Gives The Signal That One's Knot Is Complete.

NOTE: All ladders must be butted when a fire fighter is on the ladder during raising procedures.

Checklist For Truck Evolution #3 35 Foot Ladder Raise Utilizing Four Fire Fighters

1.	Attack personnel in proper protective clothing, including SCBA.	
2.	Ladder properly carried. (flat-shoulder, flat arm's length).	
3.	Perpendicular Raise: Ladder carried with fly section down toward the ground. (ladder must be rolled)	
4.	Butt-men calculate correct distance, then spot and secure butt for the raise.	
5.	Beam-men raise ladder, hand over hand motion, to a vertical position, then all fire fighters butt ladder properly.	
6.	Parallel Raise: Ladder pivoted properly. (fly side away from the building)	
7.	Fly section fully extended (hand over hand motion), ladder properly dogged and lowered to the building.	
8.	Check butt for proper distance from the building.	
9.	Ladder butted properly while being tied off.	
10.	Ladder tied off correctly at the tip; clove hitch with a safety, center of the rungs. (must take a leg lock).	
11.	Bed and fly sections tied together correctly; clove hitch with a safety, center of the rungs. (must take a leg lock).	
Co	mments:	

Minimum Company Standards	Truck Evolution #4
	50 Foot Ladder Raise
Department Time Standard:	Utilizing Four Fire Fighters

PROCEDURE: This evolution requires four fire fighters to properly carry and raise a 50 foot extension ladder to a specific location. All attack personnel must be in proper protective clothing, including SCBA.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage personnel and a properly grounded 50 foot extension ladder 75 feet from the site of the ladder raise. When the four fire fighters are ready, give the signal to proceed.
- 2. Begin Timing When The Signal Is Given To Proceed.
- 3. Steps of operation:
 - a. From the staging area, the four fire fighters will properly carry a 50 foot extension ladder 75 feet to the designated site and raise the ladder.
 - b. The fire fighters will fully extend the fly section, lower ladder to building, set the butt, and set the tormentor poles in the proper manner.
 - c. Fire fighter #1 will proceed up the ladder, take a leg lock, and simulate the "tie in" at the tip by tying the top rung of the ladder to the next lower rung. Fire fighter #2 will wait until #1 is on the fly section; then, #2 will proceed up the ladder, take a leg lock, and tie the bed and fly sections together.
 - d. Fire fighters #3 will tie off the halyard, then help butt the ladder.
 - e. Fire fighter #4 will butt the ladder in the proper manner.

NOTE: Fire fighters must signal the evaluator when their knot is complete.

4. Stop Timing The Evolution When The Last Fire Fighter Gives The Signal That One's Knot Is Complete.

NOTE: All ladders must be butted when a fire fighter is on the ladder during raising procedures.

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Checklist For Truck Evolution #4 50 Foot Ladder Raise Utilizing Four Fire Fighters

1.	Attack personnel in proper protective clothing, including SCBA.	
2.	Ladder properly carried. (Flat-Shoulder, Flat Arm's Length).	
3.	Ground ladder with the butt close to the building. Roll the ladder to a fly side down position, then butt it securely to the building for the raise.	
4.	Butt-men release the poles from the retainers, pass them to the tip-men, then take their positions as beam-men for the raise. (Down on one knee, just below toggles).	
5.	Tip-men take poles from butt-men and move out to take their position as pole-men for the raise. (About five feet apart, outside of poles, one hand on butt end, spur between fingers).	
6.	On command, beam-men rise, pivot towards building and bring ladder to shoulder level. then in unison, raise the ladder, hand over hand, to a vertical position against the building. (When the ladder is at about 45 degrees, the pole-men assume the ladder's weight and help raise the ladder).	
7.	Beam-men now become butt-men and set the butt the proper distance from the building for the raise.	
8.	One pole-man moves towards the building 90 degrees, (gives four-way stability to ladder) and one butt man moves to back side of ladder. ladder is then brought to vertical again.	
9.	Fly section fully extended (hand over hand motion), ladder properly dogged, and lowered to building.	
10.	Check butt for proper distance from building, then set poles.	
11.	Ladder butted properly while being tied off.	
12.	Ladder tied off correctly at the tip; clove hitch with a safety, center of the rungs. (Must take a leg lock).	
13.	Bed and fly sections tied together correctly; clove hitch with a safety, center of the rungs. (Must take a leg lock).	

14. Halyard tied off correctly; clove hitch with a safety, center of the rungs.	

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Minimum Company Standards Combination Engine/Truck Company Evolution #1, Laying Two 2 ½ " Lines

Department Time Standard: _____ To A Truck Or Snorkel.

PROCEDURE: This evolution uses one engine company (with four fire fighters), and one truck/snorkel company (with four fire fighters). The truck/snorkel will be set up for elevated master stream operations using (trucks = flypipe with 1 ½" tip; snorkels = SM-100 nozzle). All attack personnel must be in proper protective clothing, including SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- Stage both apparatus and personnel 200 feet away from the designated area. When all
 personnel are in their proper positions on the apparatus, give the signal for the truck /
 snorkel to proceed to the designated area and set-up for elevated master stream operations.
 As soon as the truck/snorkel stops at the designated area, give the signal for the engine to
 proceed.
- 2. Begin Timing The Evolution When The Truck/Snorkel Stops At The Designated Area.
- 3. Steps of Operation:
 - a. At the designated area, position truck/snorkel company and prepare for elevated master stream operations.
 - b. The engine company will lay two 2 ½" supply lines and connect to the truck company siamese, or snorkel intakes.
 - c. The driver and assistant driver will then lay out these two lines and connect to a fire hydrant 200 feet away.
 - d. The assistant driver will connect the soft suction to the hydrant, then reports with SCBA to the officer.
 - e. The driver will connect the dual lines, engage the pump, and turn the water into the lines when called for by his officer.
 - f. The engine officer will give the order to charge the lines to the siamese. The truck / snorkel officer will give the order to open the siamese/intakes when ready for operations.
 - g. The engine driver will pump proper pressures to all lines.
- 4. Stop Timing The Evolution When Proper Pressure Is Achieved, Relief Valve Set, And Designated Target Is Hit With Hose Stream.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Combination Engine/Truck Evolution #1 Engine Company Operations

- 1. Attack personnel in proper protective clothing including SCBA. Engine driver must wear helmet outside of cab.
- ____
- 2. Engine company will lay two 2 ½" supply lines and connect to the truck\snorkel company siamese\intakes.
- ____
- 3. Driver and assistant driver will lay out these two lines and connect to a hydrant 200' away.



4. The assistant driver will connect the soft suction to the hydrant, then reports with SCBA to his officer.



5. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each respective officer.



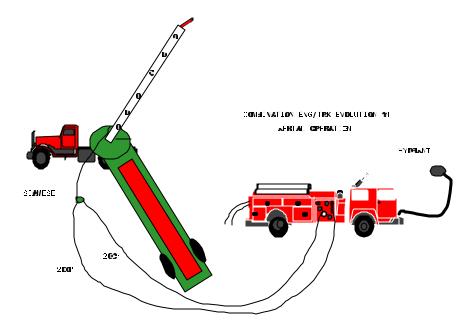
6. Engine officer will give orders to charge lines, truck officer will give orders to open siamese\intakes.

7. Engine driver will pump proper pressures.



8. Stop timing evolution when proper engine pressure and relief valve are set, and target is hit with hose stream.





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Checklist For Combination Engine/Truck Company Evolution #1 Or #2 Aerial Truck Company Operation

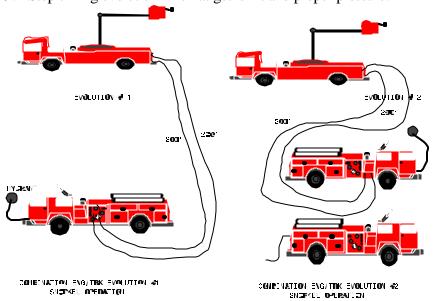
1.	Attack personnel in proper protective clothing, including SCBA.	
	Truck completely stabilized.	
	A. Jackknifed properly (tractor-drawn)	
	B. Pto properly engaged	
	C. Stabilizers set properly	
	D. Chock blocks set properly	
	E. Axle locks set properly	
	F. Parking brake set	
	G. Tillerman's wheels parallel with trailer (tractor-drawn)	
3.	Siamese placed in proper position for flypipe operation and remains	
	closed until truck officer orders it opened.	
4.	Properly secure flypipe nozzle, hose (three straps), and guide lines.	
5.		
	a 30 degree pattern. (In case it is needed)	
6.	Fire fighter positioned along side guides (control stand side) when	
•	hoisting ladder from the bed.	
7	Ladder hoisted to approximately 70° , rotated 90° towards target,	
/.		
	inclinometer checked for safety limitations, ladder extended to	
0	approximately 65 feet, and properly dogged.	
	Only one control lever lock plate open at any time.	
9.	Proper use of the accelerator. (turned off when within five degrees of	
10	desired position)	
	Hydraulic lock valve set. (Finger Tight)	
	Officer orders siamese to be opened.	
12.	Hydraulic pressure gauge constantly observed by operator to insure	
	100 psi is maintained. (Ask the operator what pressure is showing	
10	on the gauge at the present time)	
13.	Target hit with hose stream.	
~		
Co:	mments:	

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Checklist For Combination Engine/Truck Company Evolution #1 & 2 Snorkel Company Operations

1.	Attack personnel in proper protective clothing, engine drivers must
	wear helmets outside of cab.

- 2. Snorkel completely stabilized.
 - A. Air brake set
 - B. Pto properly engaged
 - C. Radio switched to snorkel platform
 - D. Chock blocks set properly
 - E. Outrigger plates properly positioned
 - F. Turned on throttle switch
 - G. Outriggers lowered and leveled
- 3. Upper boom raised 10 to 12 ft.
- 4. Lower boom raised until snorkel platform brought to ground station.
- 5. Two firefighters enter snorkel platform and secure themselves with lifebelts.
- 6. P A system turned on for communication with ground station.
- 7. Snorkel basket raised with lower boom at 85 degrees and upper boom to 90 degree angle (See drawing below).
- 8. Call for charged lines when ready.
- 9. Stop timing evolution when target is hit and proper pressure.



Minimum Company Standards	Combination Engine/Truck Co. Evolution #2
	Laying Two 2 ¹ ," Supply Lines To A Truck Or Snorkel, Utilizing 2 Engines (1 line
Department Time Standard:	from each engine).

PROCEDURE: This evolution uses two engine companies (with four fire fighters each), and one truck/snorkel company (with four fire fighters). The truck / snorkel will be set up for elevated master stream operations using (trucks = flypipe with 1 ½" tip; snorkel = SM-100 nozzle). All attack personnel must be in proper protective clothing, including SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

NOTE: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

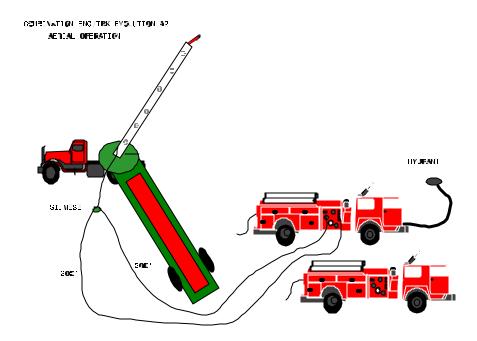
- 1. Stage all apparatus and personnel 200 feet away from the designated area. When all personnel are in their proper positions on the apparatus, give the signal for the truck / snorkel to proceed to the designated area and set-up for elevated master stream operations. When the truck / snorkel stops at the designated area, give the signal for the first engine to proceed 30 seconds later, give the signal for the second engine to proceed.
- 2. Begin Timing The Evolution When The Truck/Snorkel Stops At Designated Area.
- 3. Steps of Operation:
 - a. At the designated area, position truck/snorkel company and prepare for elevated master stream operations.
 - b. Engine company #1 will lay one 2 ½" supply line and connect to the truck company siamese, or snorkel intakes.
 - c. Engine #1's driver and assistant driver will then lay out this line and connect to a fire hydrant 200 feet away.
 - d. The assistant driver will connect the soft suction to the hydrant, then reports with SCBA to his officer.
 - e. The driver will connect the lines, engage the pump, and turn the water in when called for by each respective officer.
 - f. Engine company #2 will lay one 2 ½" supply line and connect to the truck company siamese, or snorkel intakes.
 - g. Engine #2's driver will then lay out one 2 ½" line and connect to Engine #1.
 - h. The officer on each engine will give the order to charge their respective line to the siamese. The truck/snorkel officer will give the order to open the siamese/intakes when ready.
 - i. The engine driver will pump proper pressures to all lines.
- 4. Stop Timing The Evolution When Proper Pressure Is Achieved, Relief Valve Set, And Designated Target Is Hit With Hose Stream.

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Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Combination Engine/Truck Company Evolution #2 Engine Company Operations

- 1. Attack personnel in proper protective clothing including SCBA. Engine driver must wear helmet outside of cab.
- 2. Engine #1 will lay one 2 ½" supply line and connect to the truck\snorkel company siamese\intake.
- 3. Engine #1's driver and assistant driver will lay one 2 ½" line and connect to a hydrant 200' away.
- 4. The assistant driver will connect the soft suction to the hydrant, then reports with SCBA to his officer.
- 5. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each respective officer.
- 6. Engine #2 will lay one 2 ½" supply line and connect to the truck\snorkel company siamese\intake.
- 7. Engine #2's driver will lay one 2 ½" line and connect to engine #1.
- 8. Officer on each engine will give the order to charge their respective line to the siamese\intakes. truck\snorkel officer will give the order to open the siamese\intakes.
- 9. Stop timing evolution when proper engine pressure and relief valve are set, and target is hit.



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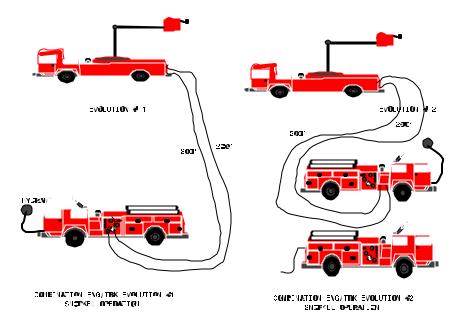
Checklist For Combination Engine/Truck Company Evolution #1 Or #2 Aerial Truck Company Operation

1.	Attack personnel in proper protective clothing, including SCBA.	
	Truck completely stabilized.	
	A. Jackknifed properly (tractor-drawn)	
	B. Pto properly engaged	
	C. Stabilizers set properly	
	D. Chock blocks set properly	
	E. Axle locks set properly	
	F. Parking brake set	
	G. Tillerman's wheels parallel with trailer (tractor-drawn)	
3.	Siamese placed in proper position for flypipe operation and remains	
	closed until truck officer orders it opened.	
4.	Properly secure flypipe nozzle, hose (three straps), and guide lines.	
5.	Release bedpipe nozzle from retainer and check to insure it is set on	
	a 30 degree pattern. (In case it is needed)	
6.	Fire fighter positioned along side guides (control stand side) when	
	hoisting ladder from the bed.	
7	Ladder hoisted to approximately 70° , rotated 90° towards target,	
/٠	inclinometer checked for safety limitations, ladder extended to	
	approximately 65 feet, and properly dogged.	
Q	Only one control lever lock plate open at any time.	
o. 9.	Proper use of the accelerator. (turned off when within five degrees of	
7.	desired position)	
10	Hydraulic lock valve set. (Finger Tight)	
	Officer orders siamese to be opened.	
	Hydraulic pressure gauge constantly observed by operator to insure	
12.	100 psi is maintained. (Ask the operator what pressure is showing	
	on the gauge at the present time)	
12	Target hit with hose stream.	
13.	Target fift with nose stream.	
C_{α}	mments:	
CU.	minents.	

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Checklist For Combination Engine/Truck Company Evolution #1 & 2 Snorkel Company Operations

- 1. Attack personnel in proper protective clothing. engine drivers must wear helmets outside of cab.
- 2. Snorkel completely stabilized.
 - A. Air brake set
 - B. Pto properly engaged
 - C. Radio switched to snorkel platform
 - D. Chock blocks set properly
 - E. Outrigger plates properly positioned
 - F. Turned on throttle switch
 - G. Outriggers lowered and leveled
- 3. Upper boom raised 10 to 12 ft.
- 4. Lower boom raised until snorkel platform brought to ground station.
- 5. Two firefighters enter snorkel platform and secure themselves with lifebelts.
- 6. P A system turned on for communication with ground station.
- 7. Snorkel basket raised with lower boom at 85 degrees and upper boom to 90 degree angle (See drawing below).
- 8. Call for charged lines when ready.
- 9. Stop timing evolution when target is hit and proper pressure.



Minimum Company Standards	Engine Evolution #1. Laying 1 3" Wyed Line
	With 2 1," Backup Line Utilizing One Engine
Department Time Standard:	

PROCEDURE: This evolution uses one engine, two attack lines operated from a wye, one backup line and four fire fighters. All attack personnel must be in proper protective clothing and SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage the engine and personnel away from the designated area. When all personnel are in place on the apparatus, give the signal for the engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The Apparatus Stops At The Designated Area.
- 3. Steps of Operation:
 - a. At the designated area, remove and lay two attack lines, wye, and 50 feet of $2-1\2$ " lead line from the engine.
 - b. Lay out 200 feet of 2-1\2" backup line, with SM-30 nozzle attached, to the fire area.
 - c. The driver and assistant driver, will proceed to lay out dual lines to the fire hydrant which is 200 feet away.
 - d. The assistant driver will connect the soft suction to the hydrant, then proceed with SCBA to the officer's line.
 - e. The driver will connect the dual lines, engage the pump, and turn the water into the wyed line when called for by his officer. The backup line will not be charged.
- 4. Stop Timing The Evolution When Proper Pressure Is Achieved, Relief Valve Set, And Designated Target Is Hit With Hose Stream.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

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Checklist For Engine Evolution #1

- 1. Attack personnel in proper protective clothing including SCBA. Engine driver must wear helmet outside of cab.

2. Stop engine at designated area. (Start time)

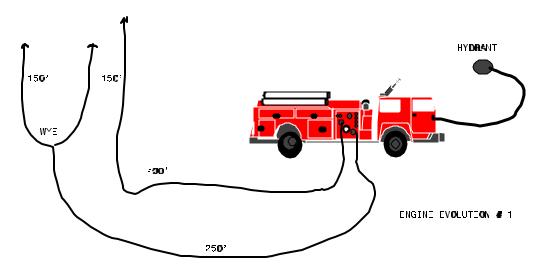
3. Officer and nozzleman will don SCBA.

- ____
- 4. Remove and lay two attack lines(1 $3\4$ "), wye, and 50 feet of 2- $1\2$ " lead line from the engine.
- ____
- 5. Lay out 200 feet of 2-1\2" backup line and nozzle (sm-30) attached to the fire area.
- ____
- 6. The driver and assistant driver, will proceed to lay out dual lines to the fire hydrant which is 200 feet.
- ____

7. The assistant driver will connect the soft suction to the hydrant, and then proceed with SCBA to the officer's line.

- ____
- 8. The driver will connect the dual lines, engage the pump, and turn the water into the wyed line when called for by his officer.
- ____

9. Stop timing evolution when proper engine pressure and relief valve are set, and target is hit.



Minimum Company Standards Engine Evolution #2. Laying 1 3" Wyed Line

With 2 1," Backup Line Utilizing Two

Department Time Standard: ____ Engines.

PROCEDURE: This evolution uses two engines, two attack lines operated from a wye, and one backup line. Each engine will be staffed by four fire fighters. All attack personnel must be in proper protective clothing and SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage the engines and personnel 200 feet away from the designated area. When all personnel are in place on the apparatus, give the signal for the first engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The First Engine Stops At The Designated Area. Start the second engine 30 seconds after the first engine arrives at the designated area.
- 3. Steps Of Operation:
 - a. At the designated area, the first engine will remove and lay two attack lines, wye, and 50 feet of $2-1\2$ " lead line.
 - b. Then the first engine driver and assistant driver will lay out the 2 ½" hose line to the fire hydrant which is 200 feet away.
 - c. The assistant driver will connect the soft suction to the hydrant, then proceeds with SCBA to the officer's line.
 - d. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each respective officer.
 - e. The second engine will remove a minimum of 200 feet of 2 ½" hose, with attached nozzle (SM-30) from the bed to be used as a backup line. The driver and assistant driver will lay out to first engine company.
 - f. The driver and assistant driver will disconnect backup line and assist first engine driver in connecting to discharge on first engine.
- 4. Stop Timing The Evolution When Proper Pressures Are Achieved, Relief Valves Set, And Designated Targets Are Hit With Hose Streams.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Engine Evolution #2

- 1. Attack personnel in proper protective clothing including scba. Engine driver must wear helmet outside of cab.
- _____

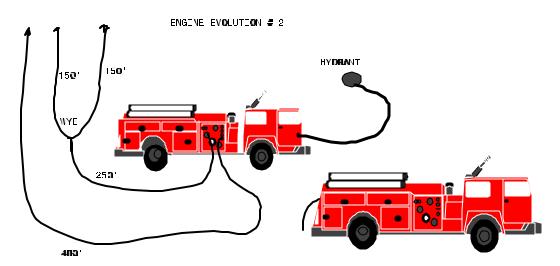
2. Stop engine at designated area. (start time).

3. Officer and nozzleman will don scba.

- ____
- 4. Remove and lay two attack lines (1 $3\4$ "),wye, and 50 feet of 2- $1\2$ " lead line from the engine.
- ____
- 5. The driver and assistant driver, will proceed to lay out single line to the hydrant which is 200 feet away.
- ____
- 6. The assistant driver will connect the soft suction to the hydrant, then proceeds with scba to the officer's line.
- ____
- 7. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each officer.
- ____
- 8. Second engine will proceed to designated area, lay single line to first engine.
- ____

9. The driver will turn the water into each line when called for.

- ____
- 10. Stop timing evolution when proper engine pressure and relief valve are set, and target is hit.
- ____



Minimum Company Standards

Engine Evolution #3. Laying 1 3" Preconnect
With 2 ½" Backup Line From The Attack
Engine And 2 Supply Lines From The Supply
Department Time Standard:

Engine Evolution #3. Laying 1 3" Preconnect
With 2 ½" Backup Line From The Attack
Engine And 2 Supply Lines From The Supply
Department Time Standard:

PROCEDURE: This evolution uses two engines, two supply lines and two handlines (one preconnect and one back-up line). Each engine will be staffed by four fire fighters. All attack personnel must be in proper protective clothing and SCBA. For safety reasons, apparatus will proceed at a safe speed during this operations.

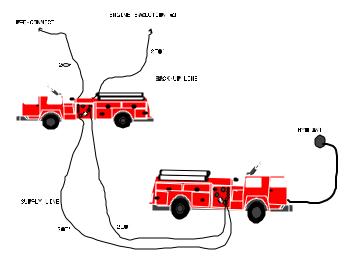
Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage the engines and personnel 200 feet away from the designated area. When all personnel are in place on the apparatus, give the signal for the first engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The First Engine Stops At The Designated Area. Start the second engine 30 seconds after the first engine arrives at the designated area.
- 3. Steps of Operation:
 - a. The first engine stops at the designated area and remains stationary.
 - b. The first engine will remove and lay the preconnected attack line to the fire area.
 - c. The first engine will then lay 200 feet of 2 ½ backup line, with attached nozzle(SM-30) to the fire area. Backup line will be operated by firefighters from the second engine on the scene.
 - d. The second engine proceeds to the first engine, then proceeds to the hydrant 200 feet away laying dual supply lines.
 - e. The assistant driver on the second engine will connect the soft suction to the hydrant, then proceeds with SCBA to the officer's line.
 - f. Driver on the attack engine will turn water into preconnect when ready, and turn water into the backup line when called for by the officer.
 - g. The driver on the attack engine will pump proper pressures for the attack lines. The driver on the supply engine will connect the hose lines, engage the pump, and turn the water into the lines when called for by the attack engine.(maintain approximately 150 psi.)
- 4. Stop Timing The Evolution When Proper Pressures Are Achieved, Relief Valves Set, And Designated Targets Are Hit With Hose Streams.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Engine Evolution #3

- 1. Attack personnel in proper protective clothing including scba. Engine driver must wear helmet outside of cab.
- 2. Stop engine at designated area and remain stationary. (Start time)
- 3. Officer and nozzleman will don scba.
- 4. Officer and nozzleman will lay preconnected line to fire area.
- 5. First engine will lay 200' of 2 ½" backup line, with nozzle attached to fire area (backup line may be operated by firefighters from the second engine on the scene).
- 6. Second engine proceeds to first engine, then proceeds to the hydrant laying dual supply lines.
- 7. Assistant driver on second engine will connect soft suction to hydrant, then proceeds with scba to the officer's line.
- 8. The driver on second engine will connect the hose lines, engage the pump, and turn the water into the lines, when called for by the attack engine. (Approx. 150 Psi)
- 9. Driver on attack engine will turn water into preconnect when ready, turn water into backup line when called for by the officer.
- 10. Driver on attack engine will pump proper pressure for the attack lines.
- 11. Stop timing the evolution when proper engine pressures and relief valves are set, and target is hit.



Minimum Company Standards Engine Evolution #4. Laying Two 2 !"

Attack Lines And One 2 1," Backup Line

Department Time Standard: _____ Utilizing Two Engines

PROCEDURE: This evolution uses two engines, two attack lines, and one back up line, all supplied directly from first engine connected to hydrant. Each engine will be staffed by four fire fighters. All attack personnel must be in proper protective clothing and SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

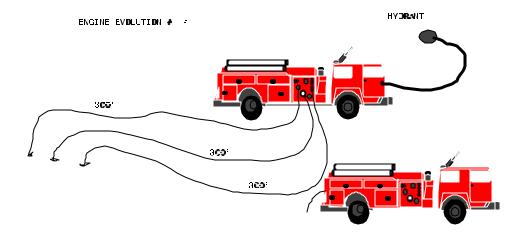
- 1. Stage the engines and personnel 200 feet away from the designated area. When all personnel are in place on the engines, give the signal for the first engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The First Engine Stops At The Designated Area. Start the second engine 30 seconds after the first engine arrives at the designated area.
- 3. Steps of Operation:
 - a. The first engine stops at the designated area and lays two $2\frac{1}{2}$ inch attack lines, one SM-30 and one 1-1/4" tip, each 100 feet in length.
 - b. The driver and assistant driver will then lay out dual lines and connect to fire hydrant which is 200 feet away.
 - c. The assistant driver will connect the soft suction to the hydrant, then proceeds with SCBA to the officer's line.
 - d. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each respective officer.
 - e. At the designated area, the second engine will remove and lay 100 feet of 2 ½ inch hose, with attached nozzle (SM-30) to be used as a backup line. (Single line lay)
 - f. The driver on the second engine will lay out one 2 !" line and connect to the first engine company.
- 4. Stop Timing The Evolution When Proper Pressures Are Achieved, Relief Valve Set, And Designated Targets Are Hit With Hose Streams.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

January 5, 2000

Checklist For Engine Evolution #4

Attack personnel in proper protective clothing including scba. Engine driver must wear helmet outside of cab.	
First engine stops at designated area, lays two 2 ½" attack lines, each 100' in length.	
Driver and assistant driver will lay out dual lines and connect to hydrant 200' away.	
Assistant driver connects soft suction to hydrant, then proceeds with scba to the officer's line.	
•	
Driver on second engine will lay one 2 ½" line and connect to first engine.	
Driver on second engine will disconnect backup line and assist first engine driver in connecting to discharge on first engine.	
Driver will turn water into hose lines when called for by each officer.	
Stop timing evolution when proper engine pressure and relief valve are set, and target is hit.	
	First engine stops at designated area, lays two 2 ½" attack lines, each 100' in length. Driver and assistant driver will lay out dual lines and connect to hydrant 200' away. Assistant driver connects soft suction to hydrant, then proceeds with scba to the officer's line. The driver will connect the hose lines, engage the pump, and turn the water into the hose lines when called for by each respective officer. At designated area, second engine will remove and lay 100' of 2 ½" hose with nozzle attached to be used as backup line. (Single line lay). Driver on second engine will lay one 2 ½" line and connect to first engine. Driver on second engine will disconnect backup line and assist first engine driver in connecting to discharge on first engine. Driver will turn water into hose lines when called for by each officer. Stop timing evolution when proper engine pressure and relief



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Minimum Company Standards	Engine Evolution #5. Laying Two 2 !" Lines
	To A Portable Monitor Utilizing One Engine.
Department Time Standard:	

PROCEDURE: This evolution uses one engine, one portable monitor set at not less than 45 degrees, two supply lines, and four fire fighters. All attack personnel must be in proper protective clothing, including SCBA. For safety reasons, apparatus will proceed at safe speed during this operation.

Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage the engine and personnel away from the designated area. When all personnel are in place on the engines, give the signal for the engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The Engine Stops At The Designated Area.
- 3. Steps of Operation:
 - a. At the designated area, connect two supply lines to portable monitor (1 ½" tip). The monitor will already be in place.
 - b. The driver and assistant driver will then lay out dual lines and connect to fire hydrant which is 200 feet away.
 - c. The officer will notify the driver when he is ready to have the water turned into the lines.
- 4. Stop Timing The Evolution When Proper Pressure Is Achieved, Relief Valve Set.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Engine Evolution #5

1. Attack personnel in proper protective clothing including scba. engine driver must wear helmet outside of cab.

2. At designated area, connect two supply lines from the engine to the portable monitor.

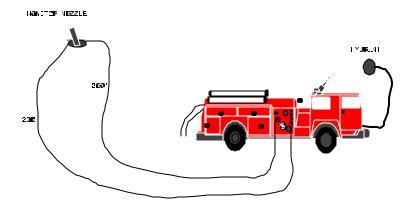
3. Driver and assistant driver will lay out dual lines and connect to hydrant 200' away.

4. Officer will notify driver when ready to have water turned into the lines.

5. Stop timing evolution when proper engine pressure and relief valve are set.

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ENGINE EVOLUTION AS



Minimum Company Standards	Engine Evolution #6. AFFF/ATC Attack
	Using 1 3" Hose And Booster Tank Water.
Department Time Standard:	

PROCEDURE: This evolution uses one engine (with four fire fighters) and one 1 ¾ inch attack line using the booster tank as a water source. All attack personnel must be in proper protective clothing, including SCBA. For safety reasons, apparatus will proceed at a safe speed during this operation.

Note: For this evolution, personnel will not don their facepiece; however, the facepiece must be kept with them at all times.

- 1. Stage the engine and personnel away from the designated area. When all personnel are in place on the engines, give the signal for the engine to proceed to the designated area.
- 2. Begin Timing The Evolution When The Engine Stops At The Designated Area.
- 3. Steps of Operation:
 - a. At the designated area, remove and lay 200 feet of 1 ¾ inch attack line from the engine. Fire fighters should lay out to an area 100 feet from the simulated fire area.
 - b. Remove and install eductor(set at 6%) not more than 200 feet from the nozzle. (Nozzle is either the SM-20 or the S.F.L. nozzle set on 95 gpm)
 - c. Remove the four 5 gallon AFFF/ATC containers and place near the eductor. Actual concentrate will not be used during this evolution. (A five gallon bucket of water with a mark to indicate its' full level is a suitable substitute)
 - d. The officer gives the order to charge the line to start concentrate flowing through the nozzle.
 - e. Advance attack line a distance of 100 feet.
 - f. The engine driver will pump proper pressure.
- 4. Stop Timing The Evolution When Proper Pressure Is Achieved, Relief Valve Set, Designated Target Is Hit With Hose Stream, And Concentrate Is Being Consumed From The 5 Gallon Container.

Note: The Driver Will Not Automatically Turn Water Into Any Open Ended Line Until The Officer In Charge Of The Line Notifies Him That The Line Has Been Connected To The Device Intended And To Turn The Water In.

Checklist For Engine Evolution #6

	G	
1.	Attack personnel in proper protective clothing including scba. engine driver must wear helmet outside of cab.	
2.	At designated area, remove and lay 200' of 1 3" attack line from the engine. Firefighter should lay out to an area 100' from simulated fire area.	
3.	Remove and install eductor.	
4.	Remove the four 5 gallon afff/atc containers.	
5.	Officer gives order to charge line.	
6.	Advance attack line a distance of 100'	
7.	Engine driver will pump proper pressure.	
8.	Stop timing evolution when proper engine pressure and relief valve are set, and target is hit.	
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